TRANSIT: MORE NEW LINES FOR PHILADELPHIA

MAY 6, 1968

RAILWAY AGE

THE TRANSPORTATION WEEKLY

McCARTNEY LIBRARY
GENEVA COLLEGE
MAY 7 1968

RD68 1116
GENEVA COLLEGE
McCARTNEY LIBRARY
BEAVER FALLS PA
15010

For Delaware River Port Authority:

A DIFFERENT kind of car

TREND SETTING RAPID TRANSIT CARS RELY ON

Adlake
SINCE 1857

QUALITY SASH AND COMPONENTS

- Curved and Flat Sash
- Operator's Curtains, Fixtures
- Door Locks, Hardware
- Sash Trim
- Luggage Racks
- Stanchions, Windscreens
- Marker and Headlights
- Indicator Lights
- Sun Visors
- Diaphragms, Safety Gates

As one of the few completely integrated manufacturers, Adlake can provide one-source responsibility for almost all your transportation car-component needs . . . meeting your demands with a program of total quality control.

Adlake
SINCE 1857

THE ADAMS & WESTLAKE COMPANY

A SUBSIDIARY OF **ALLIED** *PRODUCTS CORPORATION*

ELKHART, INDIANA 46514 • AC 219 • 264-1141

TRANSPORTATION EQUIPMENT · CONTRACT MANUFACTURING · MERCURY RELAYS · WINDOWS & CURTAIN WALLS · DOORS & ENTRANCES

Circle 1 on coupon page 38

BETHLEHEM BRAKE PINS
...stocked in 3 diameters for fast delivery

Brake pins, used in the brake rigging of standard railroad cars, are stocked by Bethlehem in all standard lengths in three popular diameters: $1\frac{3}{32}$ in., $1\frac{7}{32}$ in., and $1\frac{11}{32}$ in. Just tell us the size and placement of the cotter pin hole, and we'll give you prompt delivery in any quantity.

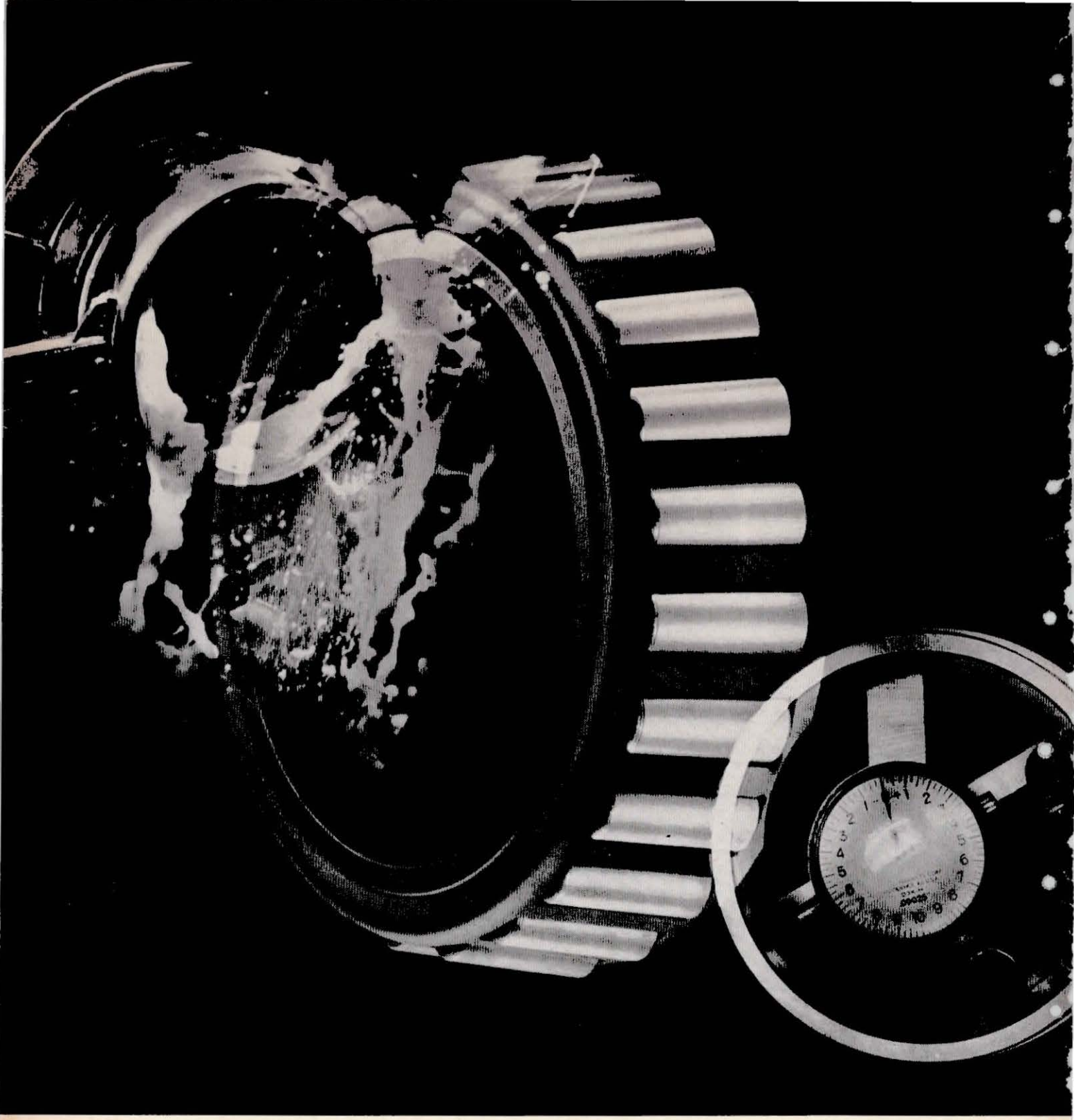
Bethlehem brake pins are cold-forged from mild, open-hearth steel with a minimum yield strength of 33,000 psi. They are smooth, true to size, and designed to fit into a drilled hole $\frac{1}{32}$ in. larger than the pin diameter. For instance, a $1\frac{3}{32}$-in. brake pin is used with a $1\frac{1}{8}$-in. drilled hole; a $1\frac{7}{32}$-in. brake pin, with a $1\frac{1}{4}$-in. hole; and a $1\frac{11}{32}$-in. pin, with a $1\frac{3}{8}$-in. hole. *Bethlehem Steel Corporation, Bethlehem, Pa. 18016*

Call Bethlehem for railroad fasteners in all sizes & types

Bethlehem carries huge stocks of ***all*** types of railroad fasteners . . . in a full range of sizes . . . all top quality . . . ready to ship. Track bolts, spikes, frog and switch bolts, brake pins, coupling pins, car bolts, screw spikes, drive spikes, high-strength structural bolts, rivets. And we can produce practically anything in the special fastener line on short notice. For more information, write for a copy of Booklet 2312 "Bethlehem Railroad Fasteners."

BETHLEHEM STEEL

BETHLEHEM STEEL



Long bearing life depends on modern, precision machining

Brenco *crown-taper* roller bearings are the most modern of all.

BRENCO, INCORPORATED
PETERSBURG, VIRGINIA

Circle 4 on coupon page 38

RAILWAY AGE May 6, 1968 • Vol. 164, No. 16

THIS WEEK

18 New cars for south Jersey transit

The $85-million DRPA route will have automatic train operation.

21 Philadelphia gets set for more transit lines

Construction of new rail lines is expected to begin this year.

24 How CTA's new cab signaling works

Safe operations are built into Chicago's Lake Street Elevated line.

26 C&NW looks at commuter parking

The commuter must have a place to leave his automobile.

40 Viewpoint—Take another look, Mr. Leighty

What about the crew-cost problem in passenger-train operation?

DEPARTMENTS

30	As the Editor Sees It	7	Short and Significant
33	Freight Carloadings	32	Supply Trade
29	Letters from Readers	37	Transit Personnel
12	Lines on Labor	23	Transit Roundup
8	Monday Morning Report	40	Viewpoint
33	New Equipment	28	Watching Washington
38	New Products Report	11	Week at a Glance
31	People in the News	36	You Ought to Know

. . . AND COMING NEXT WEEK

The story of a $110-million, 60-mile line change on Great Northern; a look at how and why Baltimore & Ohio launched a major bridge-upgrading program; and a report on material-handling on the railroads. GN's line change, made necessary by dam construction, is at the halfway point—and drilling crews are about to hole-through what will be the second-longest rail tunnel in the western hemisphere. B&O's 39-bridge improvement project is an engineering answer to one of today's marketing/transportation problems. The M/H report covers a variety of methods and machines being used, from shops to storehouses, freighthouses to scrap yards.

Editorial and Executive Offices
New York, N.Y. 10007, 30 Church St.

ROBERT G. LEWIS: Publisher
LUTHER S. MILLER: Editor
FRED C. MILES: Executive Editor

Managing Editor: Edward F. Donlon
Transit Editor: Joseph Asher
Mechanical: F. N. Houser
Car & Locomotive Cyclopedia:
C. L. Combes
Art Director: Joel Petrower
Art Editor: Maurice H. Mates
Art Assistant: Thomas J. Pendergast
Editorial Assistant: June Meyer
Director of Research: H. B. Bolander
Librarian: Edith C. Stone
Production Manager: Fred B. Hecht
Manager—Contract Department:
Constance Nicolai

Editorial and Executive Offices
Chicago, Ill. 60604, 14 E. Jackson Blvd.

C. JAMES FISHER: Vice President—Sales
GUS WELTY: Senior Editor
Western Editor: Frank Malone
Mechanical: Robert D. Bartley
Engineering:
M. H. Dick R. E. Dove
Signaling & Communications:
Robert W. McKnight E. L. Abbott
Editorial Assistant: Wanda Brown

Washington, D.C. 20004,
National Press Bldg.
Washington Editor: Walter J. Taft

London, W.C. 2, England, 4, Talbot House; 98 St. Martin's Lane
International Editors:
Geoffrey Wilson John Levett

Contributing Editors:
Norman E. Gillespie
3205 Chelsea
Orlando, Florida 32803

Charles Layng
115 West Gore St.
Orlando, Florida 32806

E. L. Woodward
876 Chattanooga Ave.
Pacific Palisades, Calif. 90272

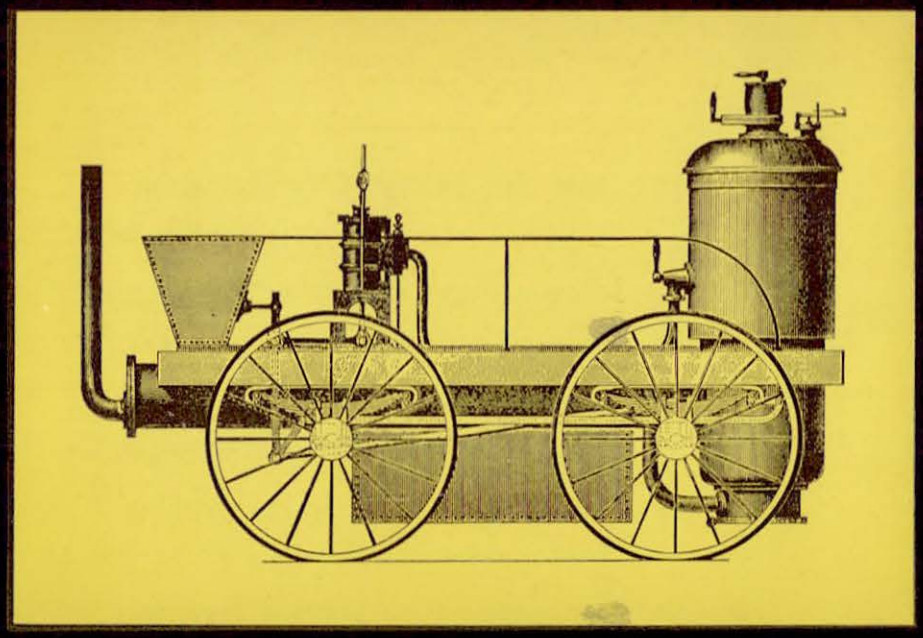
GEORGE DUSENBURY: Editorial Director

FOR LIST OF SALES OFFICES
SEE ADVERTISING
INDEX PAGE

Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.
Published weekly (except for four issues combining two-in-one) by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange, Conn.
Railroad employees' subscription rate, U.S. possessions, Canada and Mexico, $6 one year, $9 two years, all others $15 for one year, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. In other countries, $15 a year. Single copies, 60¢ except special issues. Address all subscriptions, changes of address and correspondence concerning them to Subscription Dept., Railway Age, Emmett St., Bristol, Conn. 06010.
Change of address should reach us three weeks in advance of next issue date. Send old address with new, enclosing, if possible, your address label. Post Office will not forward copies unless you provide extra postage

Circulation Dept.: John Rogers, Director of Circulation, 30 Church St., New York, N.Y. 10007. POSTMASTER—SEND FORM 3579 TO EMMETT ST., BRISTOL, CONN. 06010.
Printed at the Wilson H. Lee Co., Orange, Conn. 06477. Second-class postage paid at Orange, Conn. and at additional mailing offices.

it's not much



but it's all we had

Just a dinky little engine that could pull a couple of carriages on wheels to the next town. The promise of a faster and lower cost way to travel. And for all those people bottled up along the east coast, it was a way out. They leaped at the chance. Despite the fact a common expression of the day was "As worthless as a railroad stock", despite the preachers who said railroads would lower public and private morals, despite the cinder holes in his clothes and the inconvenience of lifting cars back on the track, the man in the street really took a fancy to the railroad.

The visionaries took one look at the tiny Best Friend of Charleston, the Tom Thumb, West Point and DeWitt Clinton and told us railroads would get bigger. They did. Big enough to empty the busy streets of Nantucket, Salem and Charleston. To bypass important cities like Oswego, Sandusky, Fort Wayne and build a giant at the foot of Lake Michigan. Big enough to steal New Orlean's monopoly of the Mississippi Valley. The visionaries foresaw the movement of people and goods, but they couldn't guess the railroads would be the deciding factor in three wars for freedom. Or railroads could supply the winter-weary North with a summer crop of fruits and vegetables daily. That railroads would carry much of the material to fly man around the world, to shoot a rocket to the moon.

Times changed, and the railroads went along. When the country needed physical growth, railroads' main cargo was people. Now people and industry are spread across the land and the railroads' main cargo is products. People have a better way to go. Products don't. Railroads, for a long time to come, will provide the fastest and safest way to get goods in volume from one place to another. And BFF is proud to be a source of the forgings and fabrications which make carrying the goods more economical as well.

Maybe it's all because somebody couldn't get where he wanted to go fast enough on a carriage or canal boat. On a little engine, he could.

BFF

RPI

Berwick Forge & Fabricating Corp.

Berwick, Pennsylvania 18603

SHORT AND SIGNIFICANT

States getting back into the passenger act? The reviews were still being written on ICC Examiner John S. Messer's recent rail passenger-service report, when at least one state began calling "Encore!" Illinois, through its attorney general, asked for an investigation of the service of three major roads linking the state with the West and Southwest. The three—Milwaukee, Santa Fe and Burlington—had no immediate comment.

MOPAC drops request for UP-IC probe Missouri Pacific is asking the ICC for permission to pull back its call for an investigation to determine whether Union Pacific can control Illinois Central through its 23.5% stock interest. MoPac had asked for the investigation in February (RA, Feb. 26, p.56), but UP in March trusteed the stock, and MoPac says this action provided the relief it had sought. Both UP and IC denied that any control was exercised, but UP went ahead with the trusteeing, in part as an effort to speed hearings on its proposal to acquire Rock Island.

New "top" for Chicago Union Station? New Yorkers marveled at the ability of contractors to put up a high-rise office building and sports complex atop Pennsylvania Station, without disrupting the flow of rail traffic down below. Now, it looks as if Chicagoans are heading toward a similar experience—at Chicago Union Station, used by Penn Central, Burlington, Milwaukee and Gulf, Mobile & Ohio. Present plans contemplate construction of a 33-story office building over the concourse. Two other office structures have been built over approach tracks north of the station, and the final plan for the area may involve five buildings.

Hoffmeister appointed to federal panel Harold M. Hoffmeister, Missouri Pacific's vice president-purchases and materials, has been named to the Federal Committee on Apprenticeship by Labor Secretary W. Willard Wirtz. The 11-member panel—five representatives from management, five from labor and one from the U.S. Office of Education—will be assigned to advise the Secretary on matters affecting apprenticeship and training. More than a decade ago, Hoffmeister helped organize the National Railroad Apprenticeship Conference, and served as its first chairman.

GATX expanding its jet aircraft leasing business General American's emphasis on transportation leasing operations was underscored anew last week with the announcement that its newly-formed aircraft leasing subsidiary, GATX/Boothe, had ordered six 737-200 Boeings at a cost of $21 million. Earlier, GATX had ordered two stretched versions of the Douglas DC-8 ($19 million) for its new rental service. The planes will be leased to certified air carriers around the world for short and medium-term periods. GATX recently announced (RA, April 29, p. 11) that it no longer will build general-service freight equipment for railroads but will concentrate on tank car construction for its leasing operation.

Airline-style meals planned by Penn Central Penn Central had good news for a lot of its passengers last week—and bad news for a handful. The good news: Moderately-priced airline type meals will be served to parlor-car passengers on 11 trains operating between New York and Washington starting April 28. Ten parlor club cars have been equipped with stainless-steel food and beverage service centers from which passengers will be served at their seats. Breakfast will cost $1.25; lunch, $2.25; dinner, $3.25. The bad news: Subject to approval by the New York State Public Service Commission, Penn Central will withdraw Trains 91 and 92 between Albany and Buffalo, effective May 25. Reason: "With an average of only 20 passengers a day actually riding each of these trains, they are losing money at a rate of $250,000 a year.

MONDAY MORNING REPORT

THE CASE FOR THE RENTED TRAIN

"It's Hertz—U-Drive," Abbott used to say to Costello. And the put-upon Costello broke them up: "Abbott," he'd reply, "if it hurts—you drive." A lot of misunderstanding in transportation today has that ring to it. And the Hertz routine seems somehow applicable, once or twice over, as Illinois Central forges ahead with its case for the reasonableness of Rent-A-Train.

NEEDED: INCREASED CAPACITY, EFFICIENT PRICING

The Department of Transportation calls Rent-A-Train the "boldest step yet made" to stimulate the economy of inland agricultural regions. IC President William B. Johnson sees the concept as a boon to all concerned, not just to the railroad or a few customers. The growth of agriculture and business in IC territory, he declares, "depends to a large extent upon an absolute increase in railroad capacity, as well as an efficient pricing system for the use of that added capacity. . . . If railroads are operated as efficiently as I believe they can be, they will be able to move traffic in volumes great enough to support both their own technological development and better and cheaper service."

SUPPORT FOR RENT-A-TRAIN BUILDS UP . . .

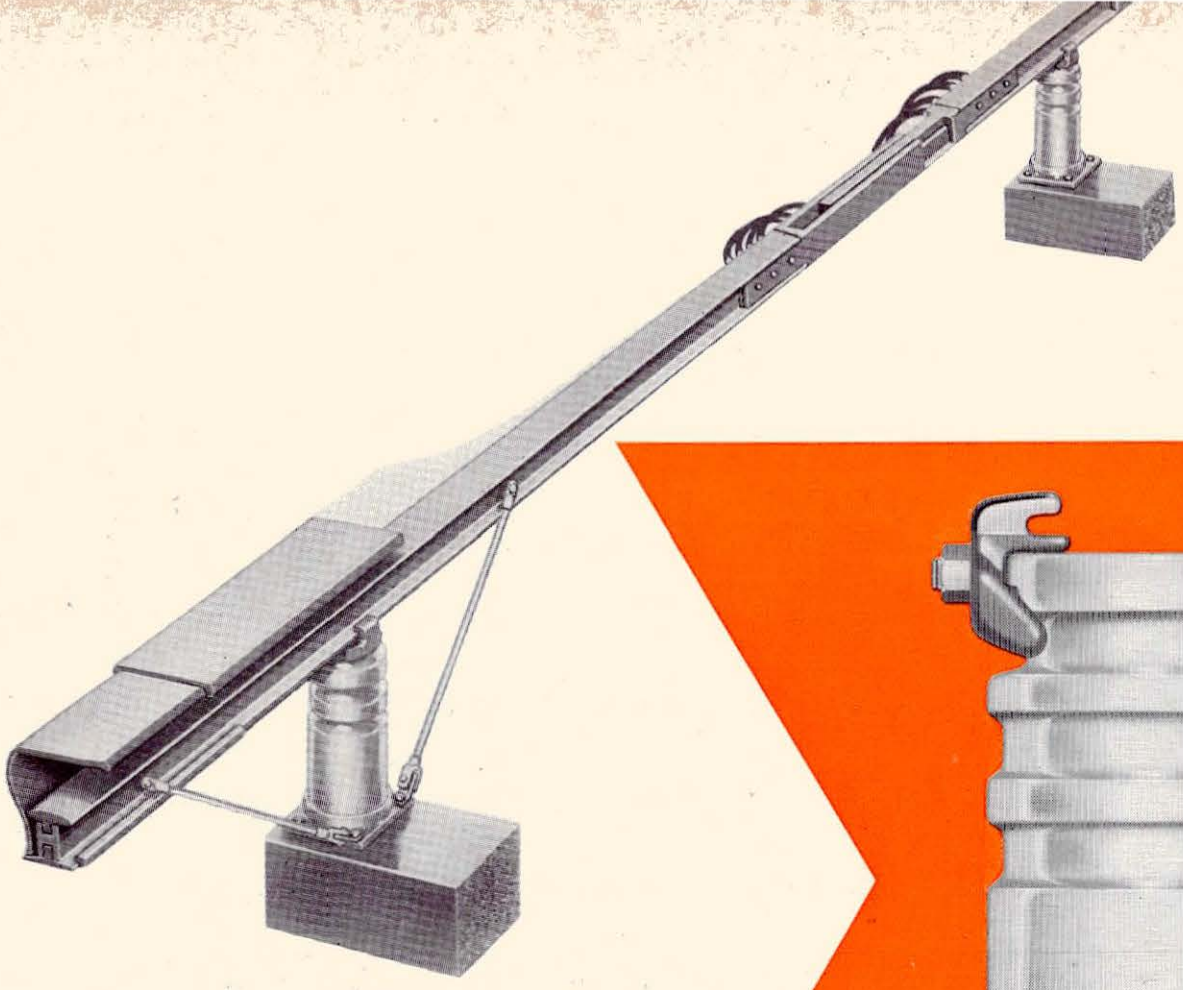
"Better and cheaper" service may echo hollowly in the vast halls of transportation these days, with service-complaints no less a problem than ever and with railroads going after their second freight-rate increase in two years. But IC can muster an impressive lineup of witnesses who believe Rent-A-Train can do the job.

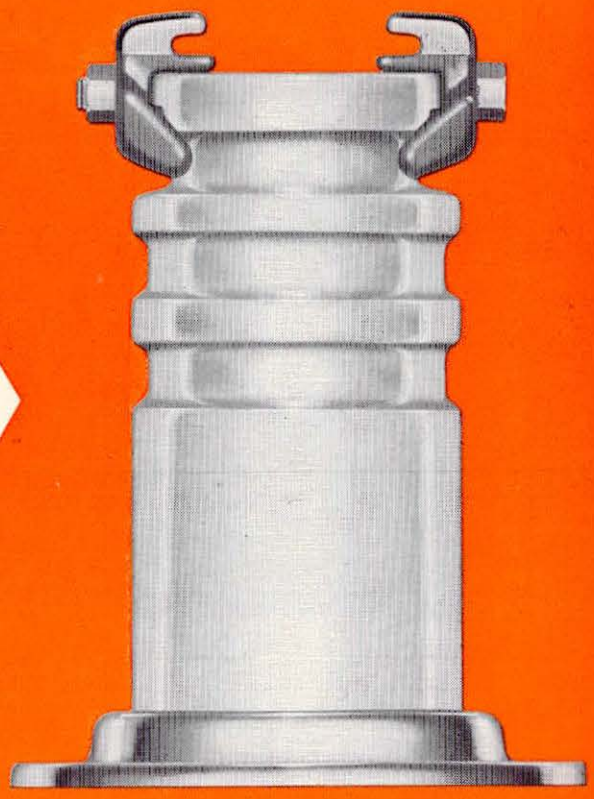
. . . AND A MARKET SHAPES UP FOR ANOTHER "RENTAL" SERVICE

Similar thinking seems to be spreading through transportation. The recent land-bridge container-train proposal advanced by Santa Fe and Penn Central is in the vein of Rent-A-Train. And in principle, both the IC grain train and the ATSF-PC import-export container train owe a lot to the pioneering work done by many roads in unit-train structuring.

BIG FIGURES—AND BIG SOLUTIONS TO BIG PROBLEMS

The figures, in all instances, are imposing. For an 86-car train, a Rent-A-Train customer will pay $1 million a year plus 1.5 mills per ton-mile. If the shipper supplies the equipment, he pays $700,000. For an 80-car land-bridge train, the shipper furnishes the equipment and pays $144,000 per roundtrip, subject to a minimum of 25 trips a year. If he leases the cars from the railroads, he pays an additional $6.50 per car per day.





Now the best costs less

New simplified design reduces premium on O-B high-quality, wet-ware porcelain insulators

High-quality, wet-ware porcelain third-rail insulators offer the best way to support and isolate your contact rail. They're impervious to moisture, resistant to contamination, and mechanically strong. Now, O-B has reduced the premium for wet-ware porcelain units to the point where it is more than justified by the reduced quantity required and almost complete elimination of replacement.

Selected for use on the Bay Area Rapid Transit system, the new simplified O-B third-rail insulator offers the same dependable electrical and mechanical strength proved on major transit operations in North America. For less than an additional two per cent of the total cost-per-mile of your third-rail system, you can now have the best.* Spaced every 10 feet under your contact rail, these units are virtually immune to normal insulator problems.

Before you write specifications for third-rail insulation, ask your O-B district manager how you can now have the best for less. Or, write us direct for the facts. 662-T

**Based on comparison of list prices for O-B's new lightweight wet-ware units with organic and dry-ware types.*

80 Years of Leading Transit Designs

THE OHIO BRASS COMPANY • MANSFIELD, OHIO • 44902
Canadian Ohio Brass Co. Ltd. • Niagara Falls, Ontario, Canada

OHIO BRASS

Circle 6 on coupon page 38

Jet Age Convenience...
Airport to Downtown Cleveland by Rapid Transit

General Electric propulsion systems will speed new CTS to the airport.

GE PROPULSION SYSTEMS WILL PROVIDE FAST, DEPENDABLE SERVICE FOR CTS PASSENGERS

By mid-1968, the Cleveland Transit System's extension to Hopkins International Airport will make Cleveland the first city in the nation to enjoy rapid transit service from center city direct to the air terminal. This speedy, dependable service will use General Electric high-performance propulsion systems in the 20 new rapid transit cars ordered for the airport extension.

High-performance equipment was chosen because it has the rapid acceleration and deceleration characteristics required to provide an attractive alternative to other forms of transportation. Selection of General Electric equipment will provide the Cleveland Transit System with years of dependable service.

For more information write: Metropolitan Transportation Development, General Electric Company, Bldg. 3-42A, Erie, Pennsylvania 16501. 605-05

TRANSPORTATION SYSTEMS DIVISION

GENERAL ELECTRIC

ERIE PENNSYLVANIA

Circle 11 on coupon page 38

WEEK AT A GLANCE

Shopcrafts plan new package of work demands

The shopcraft unions, whose most recent wage case wound up before Congress and in arbitration, are getting ready to go again with a fat package of demands. Key points, it is reported, will involve a 25% wage boost, a cutback in the work week to 30 hours and additional pay for skilled employees. One sum-up of the possible demands from the management side: "Preposterous."

Meanwhile, a step toward consolidation of four operating unions has been taken—and thus far, timetables are being met. Unification documents have been turned over to the presidents of the four organizations—the Brotherhood of Railroad Trainmen, Brotherhood of Locomotive Firemen & Enginemen, Order of Railway Conductors & Brakemen and Switchmen's Union of North America. Coming up next: Approval of the plans by the respective governing bodies of the four unions, followed by the convening of a special 40-member joint committee for further review, followed by submission of the proposal for ratification by members of each organization. The current timetable calls for creation of the 40-member committee early in May, which could mean that the unification will go out for a vote by mid-summer.

Houser named to position of RL&C editor

Railway Locomotives and Cars, oldest trade magazine in the U.S. (founded in 1832), has a new editor. Frederick N. Houser, managing editor of RL&C for the past 10 years, has been appointed editor, succeeding Charles L. Combes, who has retired after heading the publication for the past decade. The changes, announced by Publisher Robert G. Lewis, were effective May 1. Combes will continue to edit the Car and Locomotive Cyclopedia, also published by Simmons-Boardman Publishing Corp.

Houser, a Carnegie Tech graduate who worked as a high-explosive technician on the atomic bomb during World War II, was a development engineer with Babcock & Wilcox and held various positions in the mechanical department of the Bessemer & Lake Erie before joining RL&C as an associate editor in 1955. Houser will also be mechanical editor of Railway Age.

F. N. Houser

C. L. Combes

Combes, a graduate of Cornell, joined Simmons-Boardman in 1939 after serving as a test engineer in the mechanical department of the Delaware & Hudson. He became editor of the Car Builders and the Locomotive Cyclopedias in 1953, and in 1958 was named editor of Railway Locomotives and Cars and mechanical editor of Railway Age.

Messer study: Boyd is cool, Leighty isn't

Transportation Secretary Alan Boyd sees little that is encouraging in the outlook for long-haul passenger service. "The evidence is quite clear that the public has accepted other forms of transportation by an overwhelming majority," Boyd said in a written comment on ICC Examiner John S. Messer's report proposing a National Rail Passenger System. The real hope for the passenger train, suggested Boyd, lies in "innovation and development" (e.g., the new high-speed Northeast Corridor trains) rather than simply "the preservation of present concepts."

Messer's proposal, however, got an enthusiastic reception from the chief railroad labor spokesman. George E. Leighty, chairman of the Railway Labor Executives' Association, called the examiner's report "a hopeful sign that the Commission may now assume responsible leadership in the field of rail passenger service." (For editorial comment, see pp. 30 and 40.)

High Court settles old traffic case

Rio Grande and Western Pacific last week came out ahead in the U.S. Supreme Court's resolution of a traffic case with routes a century old.

The dispute, dealing with historical traffic-solicitation patterns followed by Union Pacific and Southern Pacific via their central transcontinental route, finally got to the ICC more than a decade ago.

The Commission modified the preferential-solicitation arrangements, and appeals taken from that decision led to the Supreme Court consideration. The effect of the rulings may be to put D&RGW and WP on a better footing for winning traffic in competition with the bigger roads.

GUS WELTY

LINES ON LABOR

ALAN BOYD was there, and Shef Lang. Ten railroads were represented, and seven metropolitan transportation organizations. There were consultants and professors and suppliers and, of course, a smoothly and quietly functioning cadre from the Brotherhood of Railroad Trainmen. This was the third BRT Conference on Public Transportation, at the University of Chicago's Center for Continuing Education. It was, by some definitions, a most successful session.

THE INTEREST SHOWN by railroad people is open to various interpretations. Some would say that participation in a conference like this, in times like these, gives aid-and-comfort where it shouldn't be given. Others talk of maintaining lines of communication, and of the opportunities presented by the discussion sessions as over-riding reasons for attending.

WHAT DO THE CONFERENCES PROVE? In terms of concrete results, or a firm consensus, not much. They do serve a selfish purpose: They create good publicity, good image-building stuff, for the union. And they may serve a more altruistic purpose, in bringing together men of varying viewpoints to exchange ideas. It's difficult to say whether any participant discards one idea in favor of another during the course of a conference—in other words, whether anybody *really* learns anything. But the conversation is good, and the people are bright, and the urban transportation problem is certainly big enough to talk about.

IN MOST INSTANCES, the BRT people at the conferences behave as silent sponsors. They're there, they staff the discussion groups, they act as admirable hosts. But they don't have much to say, and maybe this factor—once considered a strong point by the union—is turning out to be a weakness. Most other aspects of public transportation, urban and intercity, are explored—regulation, financing, taxation, intermodal coordination and so forth. Labor's involvement in the problem is a shadowy figure in the background: It's there, but it's seldom called upon.

HAVING A FIRM HOLD on a going thing, the BRT can be expected to start working now on the 1969 conference. Obviously, the whole conference idea has matured—maybe even enough to give labor matters the attention they deserve.

DOT wants more power to promote railroad safety

Major additions to the federal government's regulatory power over railroad safety are proposed by the Department of Transportation. The proposal is embodied in a bill submitted to Congress last week by DOT Secretary Alan S. Boyd.

The powers sought would extend safety regulation to areas of railroad operation where such regulation has been opposed by railroads but favored by unions representing railroad employees. Shortly before Boyd sent the DOT bill to Congress, the AAR refused to join the Railway Labor Executives' Association in urging enactment of new safety legislation. "Rushing pell-mell into new legislation isn't the answer," to railroad safety problems, the AAR said.

DOT's Federal Reserve Railroad Administration got authority over railroad safety when the new Department was organized a year ago. The transfer of these functions from the ICC was made despite railroad opposition.

The new areas to which the DOT bill would bring safety regulation include track and roadway maintenance, operating rules, presently uncovered aspects of rolling stock safety, and qualifications of employees (except hours-of-service). As to rolling stock, present safety law covers the whole locomotive, but on cars it covers only the brakes and specified safety appliances. It covers all signalling facilities but not train-communication facilities.

Boyd's letter transmitting the DOT bill to Congress was a sales pitch for the proposed legislation. He said it contemplated a "comprehensive statute" to replace a present "piecemeal statutory scheme." With further reference to the present safety laws Boyd said they deal with "only a few of the most obvious safety problems," whereas "more modern safety statutes establish desired safety results, leaving the exact manner of achievement to administrative regulation."

"In proposing new legislation," the Secretary commented, "the Department does not suggest that the railroad industry is insensitive to its responsibility for safe operation. However, costs and competitive pressures can frequently work at cross purposes to safety. The cost of greater safety will be borne reluctantly unless it is a burden which falls evenly on each member of the industry. Uniform federal regulation is the only way the industry can be assured of this." ■

Fly to Cleveland's airport without leaving the ground.

22 minutes.

Another first. Cleveland passengers hop on a lightweight 55 mph nickel stainless steel transit car...and in 22 minutes are at the Cleveland Hopkins Airport.

One more answer to the problems of rapid transit answered with nickel stainless steel.

Thinking rapid transit? Think nickel stainless. It's corrosion-resistant

- durable
- extra strong
- readily fabricated
- easy to weld
- attractive
- blends with other materials
- easy to clean
- economical

What's more, it's safe. Nickel stainless steel combines high strength with good ductility. Passengers are better protected.

For more information, write for our brochure, "Nickel Stainless Steel...The Modern Material for Modern Transit." The International Nickel Co., Inc., 67 Wall Street, New York, N.Y. 10005.

INTERNATIONAL NICKEL

Cleveland Transit System cars built by Pullman Standard

Circle 7 on coupon page 38

MEMBER
RPI
RAILWAY
PROGRESS
INSTITUTE

Some railroads don't need our oil.

But your diesels need Sinclair Gascon Diesel Lubricating Oils
Over 100 railroads use them
And they've gone a long way with them
Over ten billion miles!
PLAY SAFE—USE SINCLAIR

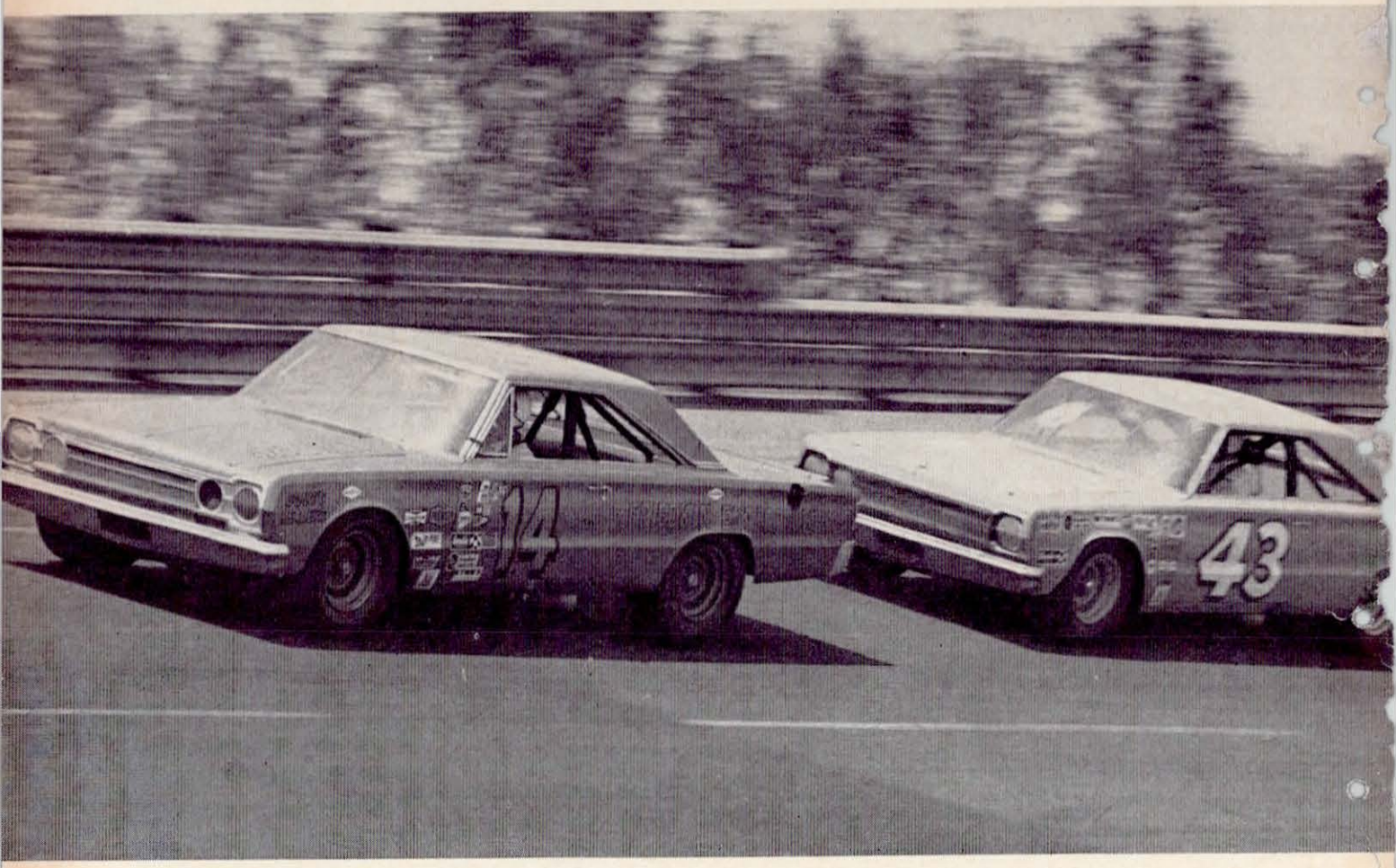
SINCLAIR GASCON GL-XD
A dependable, long time performer.
High lubricating ability.
Low wear rates.
Low maintenance costs.

SINCLAIR GASCON GL-SUPREME
A high dispersant oil.
Cleaner engines.
Excellent alkalinity retention.
High stability.

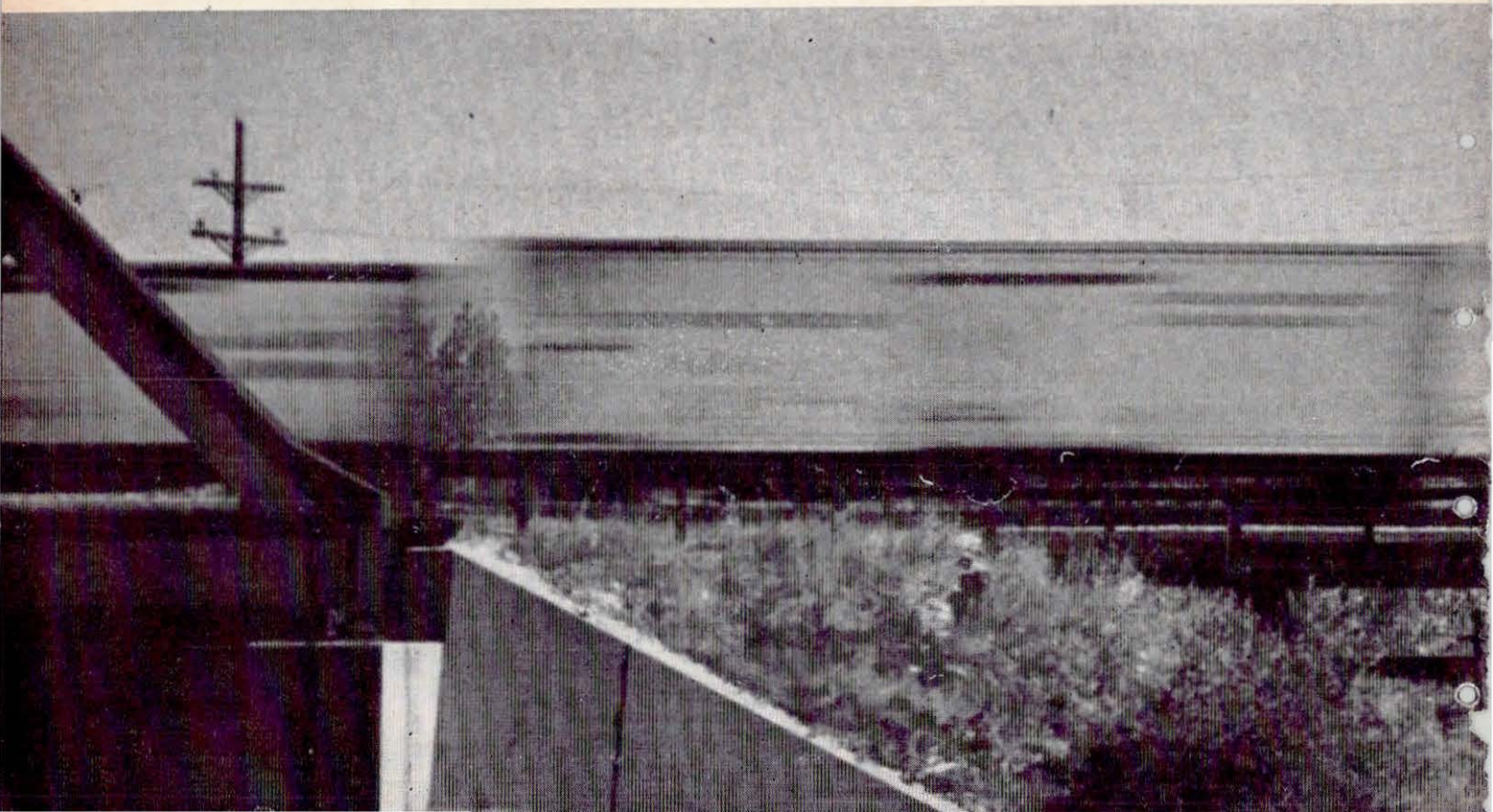
Sinclair® **Sinclair**

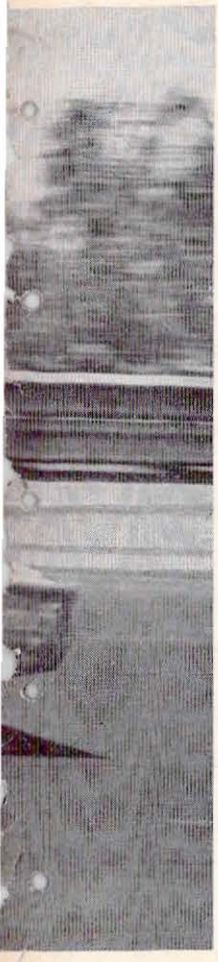
Railway Sales
New York—Chicago—Houston

Racing cars do it



Box cars do it





It's called "drafting"

The new railway age – a series

In non-technical language, to move along rapidly you've got to push a lot of air out of your way in front and drag along a semi-vacuum behind. On the race track, two cars on the same team will take advantage of this by "drafting". One noses into the low pressure area behind the other, cutting way down on his frontal air resistance. The front driver benefits, too; the following car diminishes the low pressure area clawing at the back of his car. Both cars go faster, burn less gas. In fact, if all the cars on the track gathered in one long line, they'd all have easier going. And what you'd have would be a *train*!

But the automatic, built-in "drafting" of its coupled cars is only one reason for the terrific fuel efficiency of a train. Not only is there less air resistance, there's less *rolling* resistance. Coming back to automobiles for a minute, the first thing they do in a super-mileage contest is to blow up the tires to near the bursting point—making them *almost* as hard as the steel wheels of a train. The idea is to cut down on the heavy rolling friction in a flexing tire (which is what makes them run so hot). Nothing moves so easily as a steel wheel rolling on a steel track.

Efficiency like this is the rock-hard foundation on which railroaders and their suppliers are building a new railway age.

Huge new unit trains haul shiploads of grain, coal, automobiles—where no ship can travel. Special cars carry special loads: red hot, frozen solid, fragile, too big and heavy to go any other way.

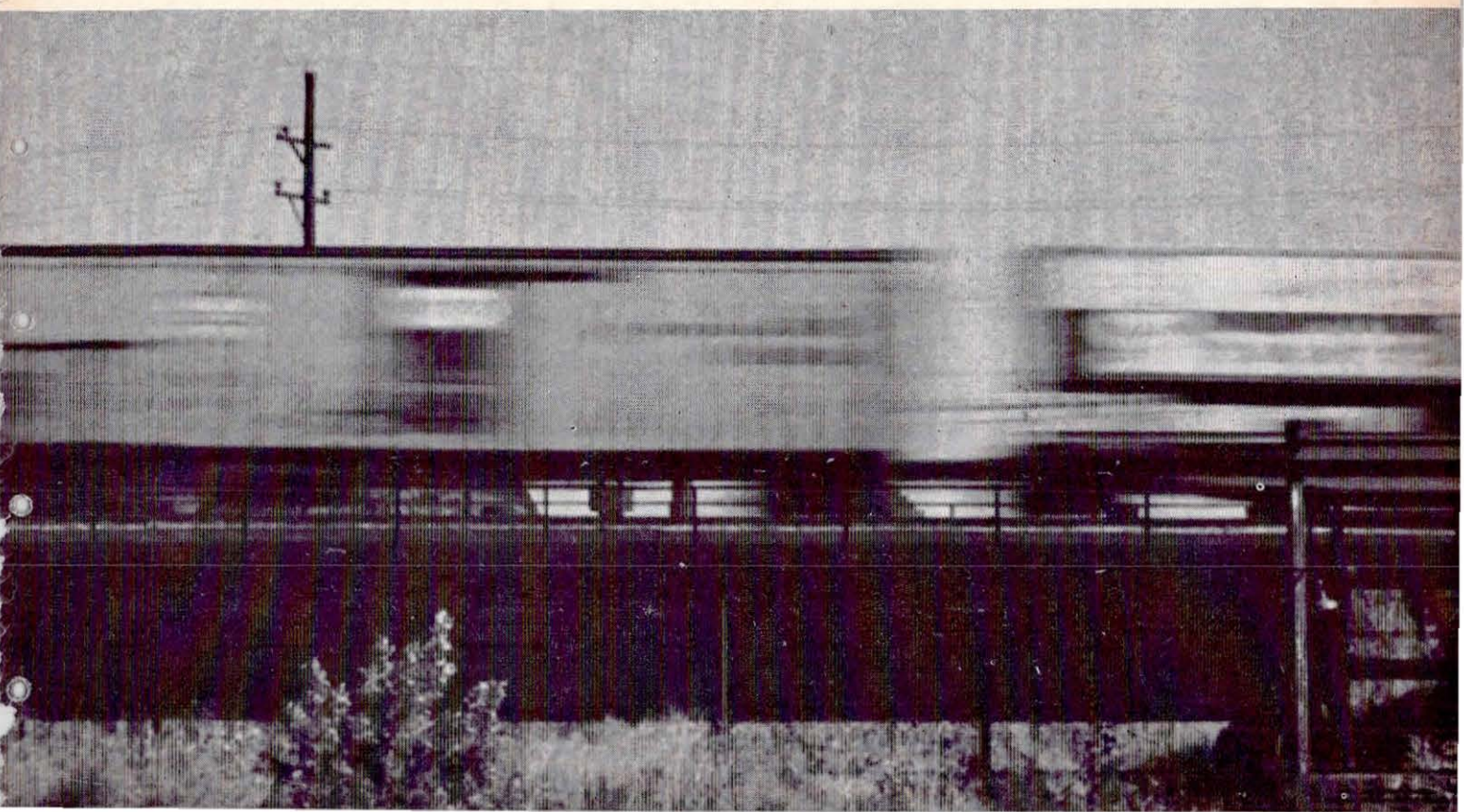
New ways to load and unload are accelerating turnaround speeds. New signalling, communication and computerization are giving the railroad a central nervous system to match its own complexity and potentially fantastic efficiency.

Where do railroaders keep up with all this? In the pages of weekly RAILWAY AGE. What a place to talk about *your* ideas for progress!

Be part of the weekly excitement in

RAILWAY AGE

the transportation weekly



CAR CONTROL CONSOLE, designed for ATO, is normally monitored only by operator. Carrier on third rail gives two-way communication with central control.

each car is 67½ feet long, 10 feet wide and 12⅓ feet high, there are two body configurations represented in the 75-car order. There will be 25 "married pair" sets, involving 50 cars, and 25 single-unit cars with cabs and streamlining at both ends. Each "married pair" car has only a single cab—an open control station similar to that of contemporary buses. The operator's console is dominated by the ATO control, cab signals and other instruments. There is also a conventional manual controller for hostling and emergency operation.

The only manual operations normally performed by the train attendant are the opening and closing of the doors at stations, followed by pushing a button to energize the ATO system and start the train. From this point the cycle is automatic until the train stops at the next station.

● **Maximum capabilities.** The ATO system, supplied by Wabco's Signal and Communications Division, responds to intelligence from wayside inductors and the running rails. The system accelerates the train, maintains the correct speed limit, slows the train on curves, and maintains proper station separation. It also decelerates and stops the train, spotting it within a 40-foot tolerance. All accelerations and decelerations are the maximum capability of the cars. Running speeds are the maximum allowed by the cab signal system.

Framing and exterior sheathing of the cars are unpainted, high-tensile stainless steel assembled by welding. DRPA specified a structure capable of resisting an end load of 200,000 pounds without yield, a requirement which was confirmed by a squeeze test of the first car at the Budd laboratory. The entire end of the DRPA car is constructed of formed stainless steel. To meet the specification for quietness, the entire shell is acoustically treated: all hidden surfaces, all metal linings and air conditioning ducts are covered with sound deadening material.

● **For seated passenger.** The interior of the car is arranged primarily for seated passengers. Half of the fixed, transverse bucket seats face in each direction. Single cars accommodate 72 passengers. Each car of a married pair seats 80. All interior surfaces are either integrally colored plastic materials or bright metal. Floors are covered with rubber sheet over plymetal.

Wind screens at both sides of each of the pair of electrically operated sliding doors on each side protect the seated passengers and designate an area for standees. Because there will be no guard on DRPA trains, a door closing alarm rings for 3 seconds, followed by a 2-second silent interval, before the doors close. The operator can monitor loading and unloading from his station at the front of the train. Door control is interlocked with traction controls for safety.

Trucks are Budd all-welded, fabricated design having inside bearings and unit tread brakes. The carbody is supported by air springs in which pressure is varied to maintain constant floor height regardless of passenger load. Each axle is powered by a 130-hp General Electric motor driving through a double-reduction-gear parallel drive. The control system is all-electric with nine modes of operation—four power modes, a coast mode, and four levels of braking. The same load weighing system which regulates air spring pressure acts to maintain acceleration and deceleration rates independent of passenger load.

The cars have an initial acceleration of 3.0 mph per second, compared with 2.5 mphps for the latest New York subway cars. A train with a full seated load can reach 50 mph in 22 seconds while covering 940 feet.

● **A route extended.** The route to be served by these new trains is actually an extension of a 4-mile transit line completed in 1936 and connecting downtown Camden and Philadephia by crossing the Delaware River on DRPA's Benjamin Franklin suspension bridge. The existing line is a subway in both cities. The extension, entirely grade separated, was produced by elevating or depressing the former Camden main line of the Pennsylvania-Reading Seashore Lines, most of which was abandoned to make the new transit route.

The construction, authorized by the governors of Pennsylvania and New Jersey in 1962, was based on a study indicating a total cost of $50 million. Inflation and the decision to purchase rather than lease the PRSL right of way have resulted in an expenditure about 70% greater than the original estimate. It has been financed entirely by DRPA. Among major cost items have been $13.6 million for the 75 cars, $2.6 million for signal and interlocking equipment, $11 million for the power system.

● **More power.** Power distribution will be by an extension of the 600-volt d-c third rail of the existing DRPA line. Two power substations have been built to receive high-voltage a-c from local utilities. A loop transmission system at 26,000-volts ac delivers this power to seven rectifier substations which produce the third-rail d-c current.

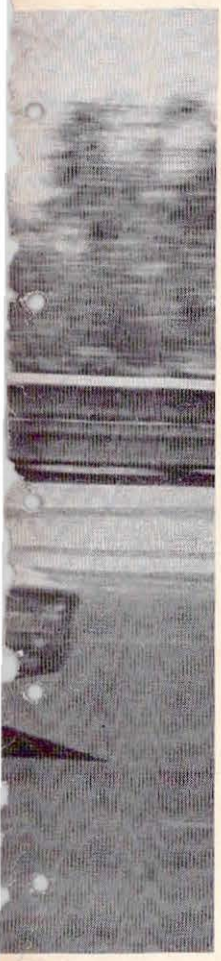
The track is built to main-line railroad standards with 132-pound welded rail and wood ties, except on elevated structures where the rail is secured directly to the tops of the pre-stressed concrete beams. With only 72,000-pound transit cars using this track, according to DRPA Chief Transit Engineer Robert B. Johnston, there should be virtually no deterioration in ride quality and little need for maintenance.

Actually, the heavy track with its minimal maintenance requirements was the result of an economic analysis which balanced substation spacing against the investment in metal cross section for current return—metal which could have been copper cable or the heavy steel rail which was chosen.

Four complete trains of welded rail, processed by a welding facility on the Baltimore & Ohio in West Virginia, have been required to lay the track. DRPA engineers developed special techniques for building completely new track with welded rail.

Ballast is distributed on the completed roadbed and the ties with tie plates attached are placed. Rollers are placed atop every fifth tie. At the front of the rail train are three flat cars fitted with a diesel-powered winch system which can feed out approximately 150 feet of rail before its cables must be reattached for another "pull." As the pair of 1,440-foot rails are fed out over the winch car, held to approximate gauge by a spreader bar, a special wide-track tractor pulls the ends away from the rail train, allowing the rails to settle on the rollers which are subsequently removed prior to final spiking. The rails are then field welded into block-length segments. The third

(Continued on page 28)



It's called "drafting"

The new railway age – a series

In non-technical language, to move along rapidly you've got to push a lot of air out of your way in front and drag along a semi-vacuum behind. On the race track, two cars on the same team will take advantage of this by "drafting". One noses into the low pressure area behind the other, cutting way down on his frontal air resistance. The front driver benefits, too; the following car diminishes the low pressure area clawing at the back of his car. Both cars go faster, burn less gas. In fact, if all the cars on the track gathered in one long line, they'd all have easier going. And what you'd have would be a *train*!

But the automatic, built-in "drafting" of its coupled cars is only one reason for the terrific fuel efficiency of a train. Not only is there less air resistance, there's less *rolling* resistance. Coming back to automobiles for a minute, the first thing they do in a super-mileage contest is to blow up the tires to near the bursting point—making them *almost* as hard as the steel wheels of a train. The idea is to cut down on the heavy rolling friction in a flexing tire (which is what makes them run so hot). Nothing moves so easily as a steel wheel rolling on a steel track.

Efficiency like this is the rock-hard foundation on which railroaders and their suppliers are building a new railway age.

Huge new unit trains haul shiploads of grain, coal, automobiles—where no ship can travel. Special cars carry special loads: red hot, frozen solid, fragile, too big and heavy to go any other way.

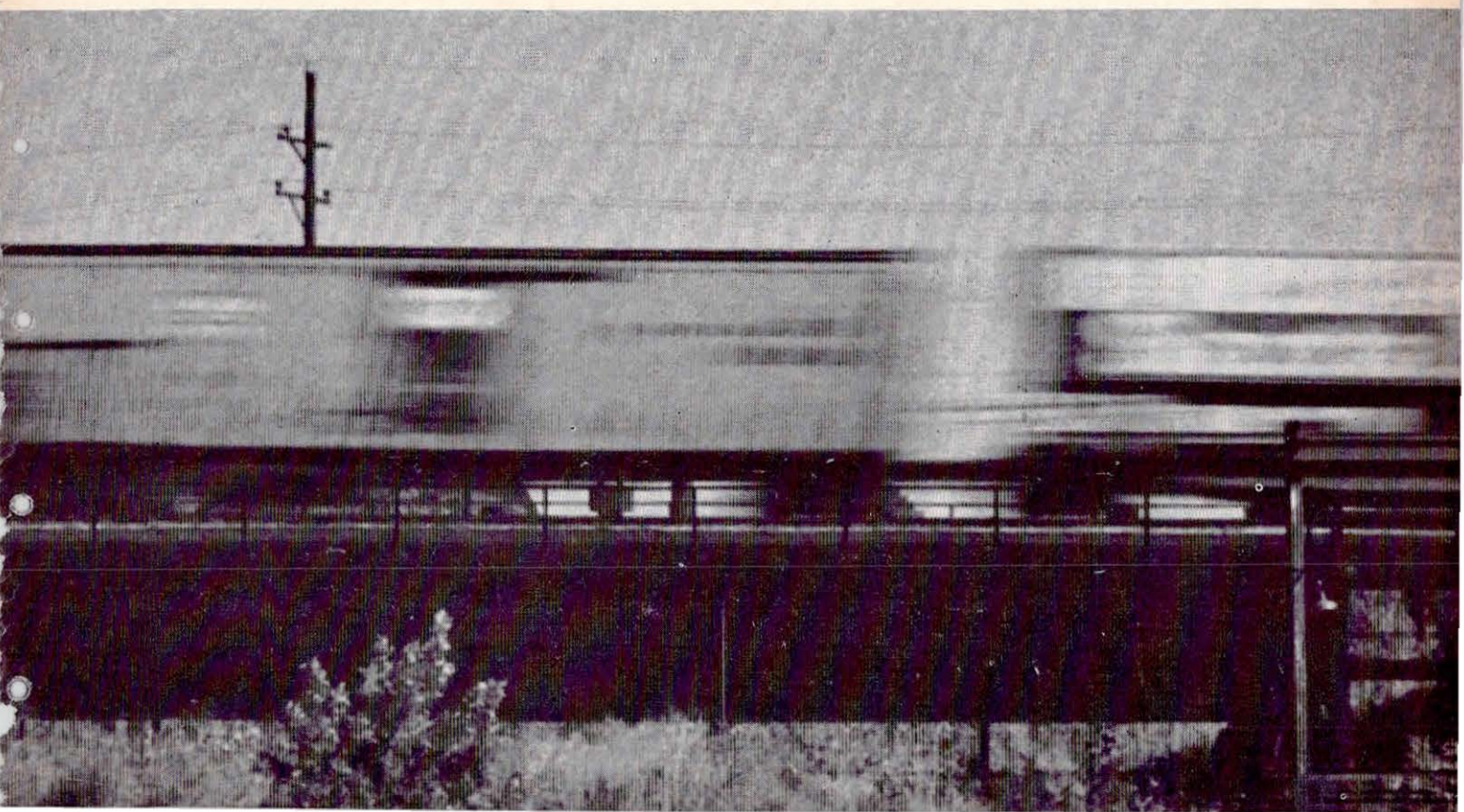
New ways to load and unload are accelerating turnaround speeds. New signalling, communication and computerization are giving the railroad a central nervous system to match its own complexity and potentially fantastic efficiency.

Where do railroaders keep up with all this? In the pages of weekly Railway Age. What a place to talk about *your* ideas for progress!

Be part of the weekly excitement in

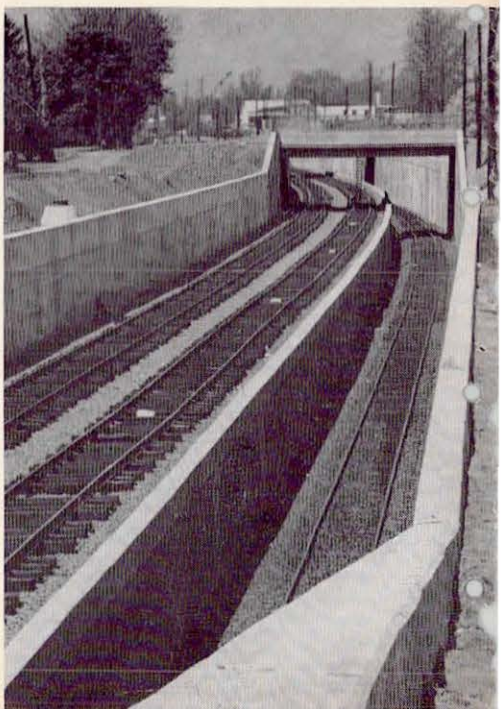
RAILWAY AGE

the transportation weekly



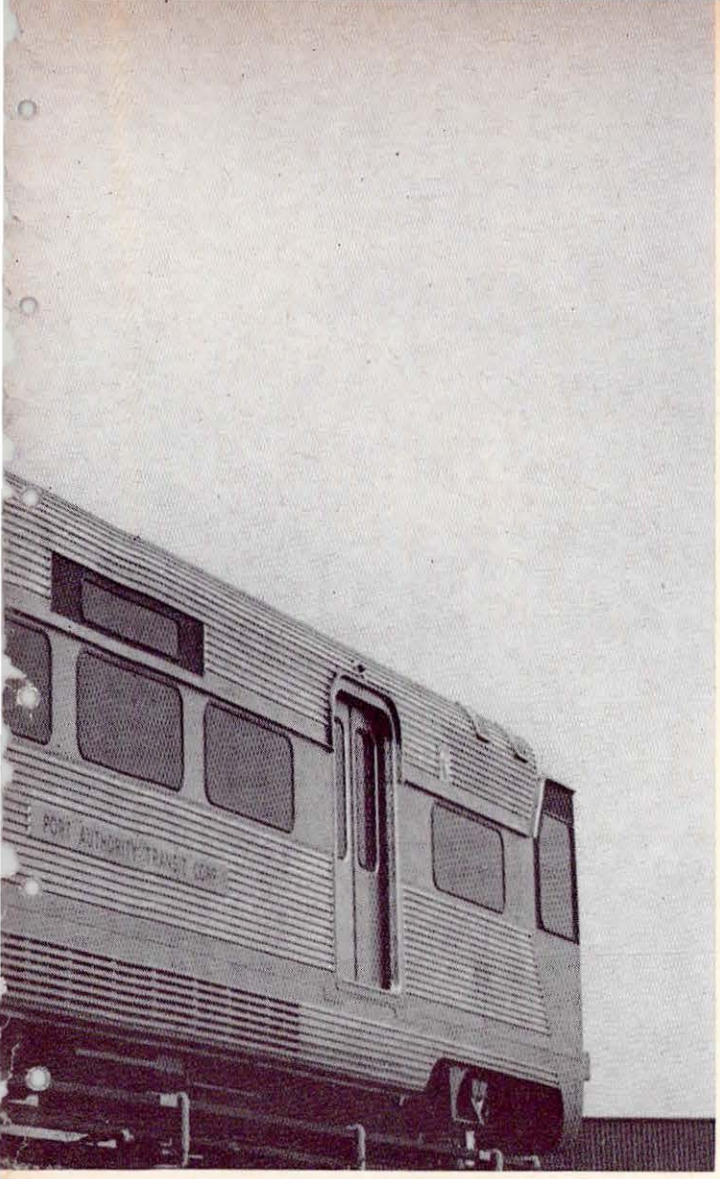
PLUMP PROFILE of DRPA car, dictated by Philadelphia subway clearances, houses most sophisticated package of automated

South Jersey transit has cars

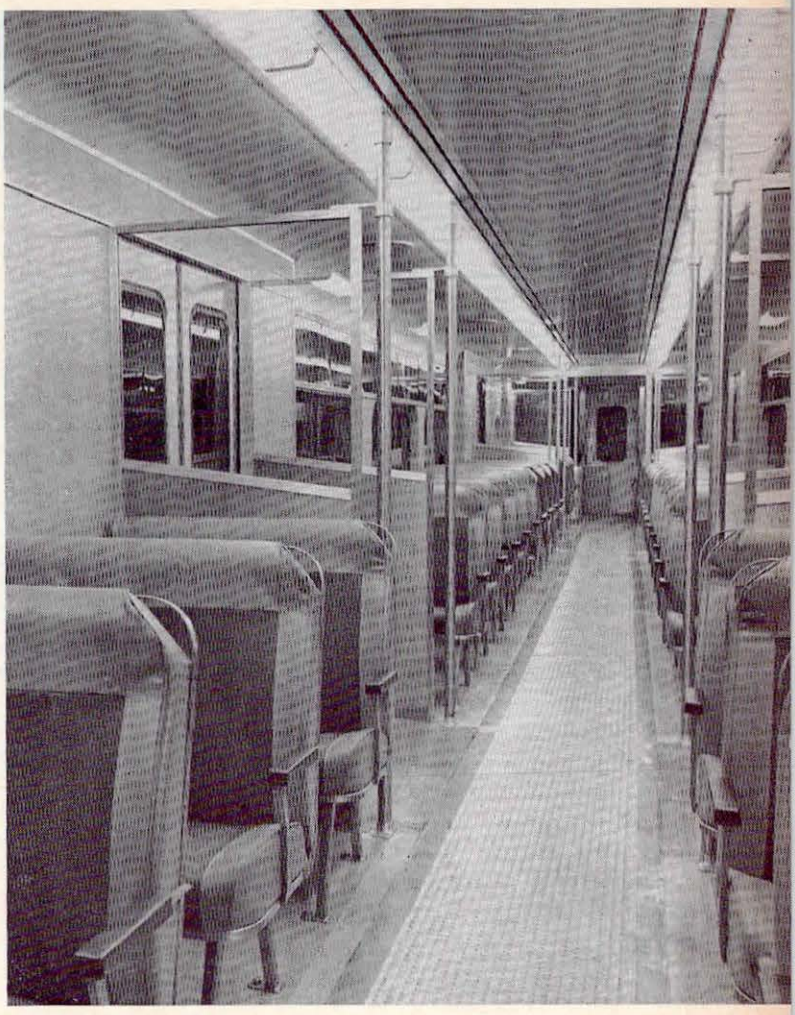


Route follows former PRSL line

Seventeen grade crossings were eliminated along former PRSL line out of Camden as DRPA raised most sections on embankments and elevated structures, one a half-mile long (above). At Haddonfield (right) a new 5,000-foot cut is shared with single-track PRSL. Six stations have parking for over 5,000 autos.



controls yet utilized for rapid-transit operation.



TRANSVERSE SEATING is used in the air conditioned cars.

designed for new service

The $85-million, 10.5-mile DRPA route will have automatic train operation and fare collection.

Although the shape of things to come dominates discussions at most transit meetings, until recently concepts like automatic train operation, automatic fare collection and 75-mph cruising speeds had to be theoretical. Not so during the Philadelphia session of American Transit Association's rail transit group last month.

● **Finite futures.** Delaware River Port Authority (DRPA) showed the ATA delegates its 10.5-mile, $85-million South Jersey rapid transit line which is nearing completion. This DRPA route is the first to incorporate the high degrees of automation and passenger comfort and convenience which planners agree are necessary to produce transit which is fully competitive with the private automobile. It is only a matter of months until these shibboleths of the new transit age will be put to the test southeast of Camden, N.J.

Just before the ATA inspection, Budd began to deliver the new cars with which the line will be operated. Existing subway tunnels by which they enter Camden and Philadelphia dictated the over-all dimensions of these stainless-steel cars. Every effort has been made, however, to have them resemble the traditional subway car as little as possible in performance, comfort and appearance.

Actually, DRPA's new passenger equipment represents a blending of transit and suburban service concepts with sufficient power to make possible a 23-minute schedule for the 14.6-mile run from Lindenwold, outermost New Jersey station, to the downtown Philadelphia terminal with ten intermediate stops. DRPA specified that at top speed the interior noise be no greater than that of a quality automobile moving at 50 mph over a smooth highway.

● **Two configurations.** Although

CAR CONTROL CONSOLE, designed for ATO, is normally monitored only by operator. Carrier on third rail gives two-way communication with central control.

each car is 67½ feet long, 10 feet wide and 12⅓ feet high, there are two body configurations represented in the 75-car order. There will be 25 "married pair" sets, involving 50 cars, and 25 single-unit cars with cabs and streamlining at both ends. Each "married pair" car has only a single cab—an open control station similar to that of contemporary buses. The operator's console is dominated by the ATO control, cab signals and other instruments. There is also a conventional manual controller for hostling and emergency operation.

The only manual operations normally performed by the train attendant are the opening and closing of the doors at stations, followed by pushing a button to energize the ATO system and start the train. From this point the cycle is automatic until the train stops at the next station.

● **Maximum capabilities.** The ATO system, supplied by Wabco's Signal and Communications Division, responds to intelligence from wayside inductors and the running rails. The system accelerates the train, maintains the correct speed limit, slows the train on curves, and maintains proper station separation. It also decelerates and stops the train, spotting it within a 40-foot tolerance. All accelerations and decelerations are the maximum capability of the cars. Running speeds are the maximum allowed by the cab signal system.

Framing and exterior sheathing of the cars are unpainted, high-tensile stainless steel assembled by welding. DRPA specified a structure capable of resisting an end load of 200,000 pounds without yield, a requirement which was confirmed by a squeeze test of the first car at the Budd laboratory. The entire end of the DRPA car is constructed of formed stainless steel. To meet the specification for quietness, the entire shell is acoustically treated: all hidden surfaces, all metal linings and air conditioning ducts are covered with sound deadening material.

● **For seated passenger.** The interior of the car is arranged primarily for seated passengers. Half of the fixed, transverse bucket seats face in each direction. Single cars accommodate 72 passengers. Each car of a married pair seats 80. All interior surfaces are either integrally colored plastic materials or bright metal. Floors are covered with rubber sheet over plymetal.

Wind screens at both sides of each of the pair of electrically operated sliding doors on each side protect the seated passengers and designate an area for standees. Because there will be no guard on DRPA trains, a door closing alarm rings for 3 seconds, followed by a 2-second silent interval, before the doors close. The operator can monitor loading and unloading from his station at the front of the train. Door control is interlocked with traction controls for safety.

Trucks are Budd all-welded, fabricated design having inside bearings and unit tread brakes. The carbody is supported by air springs in which pressure is varied to maintain constant floor height regardless of passenger load. Each axle is powered by a 130-hp General Electric motor driving through a double-reduction-gear parallel drive. The control system is all-electric with nine modes of operation—four power modes, a coast mode, and four levels of braking. The same load weighing system which regulates air spring pressure acts to maintain acceleration and deceleration rates independent of passenger load.

The cars have an initial acceleration of 3.0 mph per second, compared with 2.5 mphps for the latest New York subway cars. A train with a full seated load can reach 50 mph in 22 seconds while covering 940 feet.

● **A route extended.** The route to be served by these new trains is actually an extension of a 4-mile transit line completed in 1936 and connecting downtown Camden and Philadephia by crossing the Delaware River on DRPA's Benjamin Franklin suspension bridge. The existing line is a subway in both cities. The extension, entirely grade separated, was produced by elevating or depressing the former Camden main line of the Pennsylvania-Reading Seashore Lines, most of which was abandoned to make the new transit route.

The construction, authorized by the governors of Pennsylvania and New Jersey in 1962, was based on a study indicating a total cost of $50 million. Inflation and the decision to purchase rather than lease the PRSL right of way have resulted in an expenditure about 70% greater than the original estimate. It has been financed entirely by DRPA. Among major cost items have been $13.6 million for the 75 cars, $2.6 million for signal and interlocking equipment, $11 million for the power system.

● **More power.** Power distribution will be by an extension of the 600-volt d-c third rail of the existing DRPA line. Two power substations have been built to receive high-voltage a-c from local utilities. A loop transmission system at 26,000-volts ac delivers this power to seven rectifier substations which produce the third-rail d-c current.

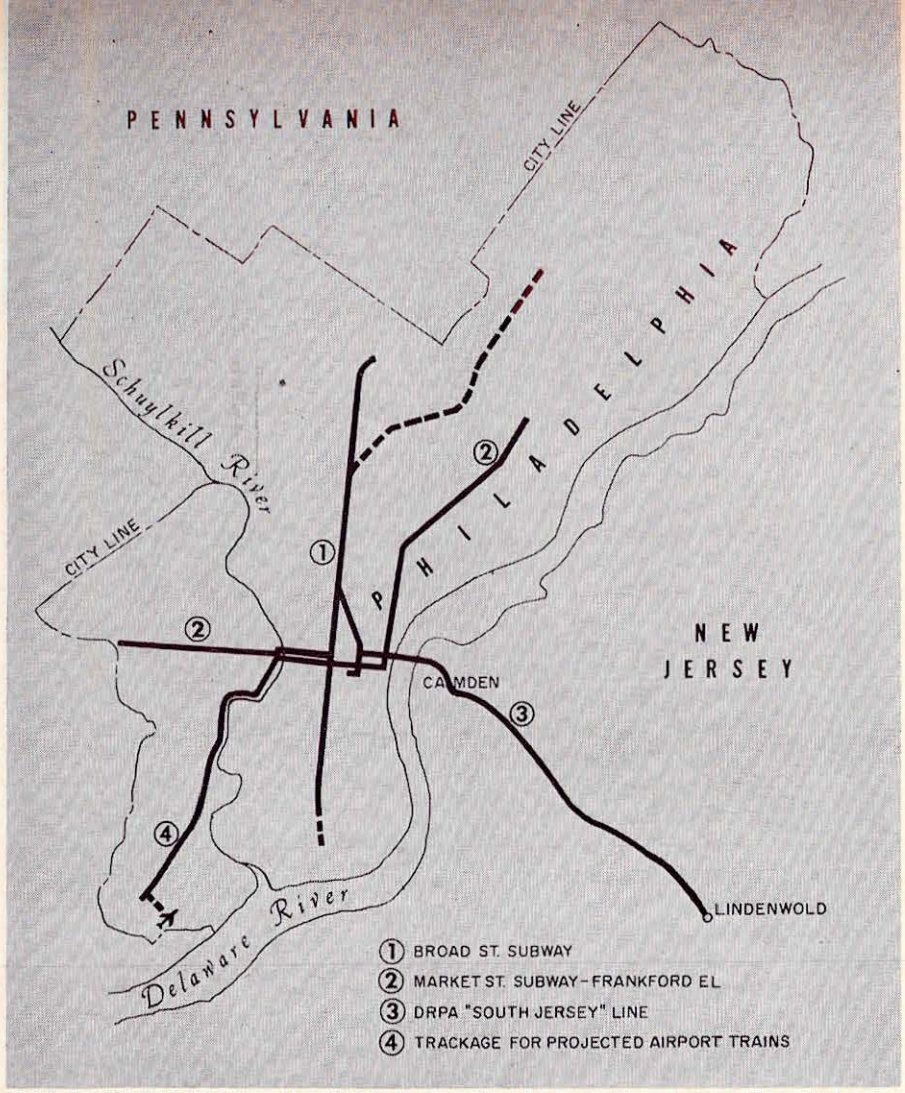
The track is built to main-line railroad standards with 132-pound welded rail and wood ties, except on elevated structures where the rail is secured directly to the tops of the pre-stressed concrete beams. With only 72,000-pound transit cars using this track, according to DRPA Chief Transit Engineer Robert B. Johnston, there should be virtually no deterioration in ride quality and little need for maintenance.

Actually, the heavy track with its minimal maintenance requirements was the result of an economic analysis which balanced substation spacing against the investment in metal cross section for current return—metal which could have been copper cable or the heavy steel rail which was chosen.

Four complete trains of welded rail, processed by a welding facility on the Baltimore & Ohio in West Virginia, have been required to lay the track. DRPA engineers developed special techniques for building completely new track with welded rail.

Ballast is distributed on the completed roadbed and the ties with tie plates attached are placed. Rollers are placed atop every fifth tie. At the front of the rail train are three flat cars fitted with a diesel-powered winch system which can feed out approximately 150 feet of rail before its cables must be reattached for another "pull." As the pair of 1,440-foot rails are fed out over the winch car, held to approximate gauge by a spreader bar, a special wide-track tractor pulls the ends away from the rail train, allowing the rails to settle on the rollers which are subsequently removed prior to final spiking. The rails are then field welded into block-length segments. The third

(Continued on page 28)



NEW ARTERIES: Besides the DRPA line coming in from New Jersey, the city is due for eight miles of subway extensions, plus a small but crucial link to the airport.

Philadelphia gets set for added transit lines

Settlement of a drawn-out lawsuit opens the way for construction to begin on new rail lines. Work should begin this year.

While the Delaware River Port Authority moves along to complete its line from the southern New Jersey suburbs into Philadelphia, additional transit plans are taking shape on the Pennsylvania side of the Delaware River.

The long-awaited takeover of the city subways by the Southeastern Pennsylvania Transportation Authority is at hand. The board of directors of the Philadelphia Transportation Co., which operates the subways, agreed to terms set by SEPTA for the latter to acquire the former company's assets and operations.

Stockholder approval of the PTC board's action must still be obtained, but the verdict is considered certain.

The SEPTA and PTC boards agreed on a purchase price of $48 million, and thus ended litigation that had dragged on for over three years, and threatened at one point to go to the U.S. Supreme Court.

Settlement of the case paves the way for implementation of SEPTA's 10-year master plan for mass transit throughout the region (except for DRPA activities).

The most important single step that can now take place is that construction can begin on subway extensions totalling almost eight miles.

Other important steps that will follow include long-delayed construction of a mid-city underground rail connection between the PRR and Reading commuter terminals and construction of a rail line out to the airport.

There is also a continuing program of upgrading and capital improvement of existing services, through purchase of new cars, and renovation of fixed facilities.

● **Why the delay.** Philadelphia has never suffered from a shortage of transit plans—and ambitious ones they generally are. The problem has been a proliferation of local agencies with a dizzying variety of initials, functions, and sometimes conflicting ideas.

Until now, PTC has functioned as owner and operator of one of the two subways. The other one is owned by the city but operated by PTC on a contract basis.

SEPTA is an outgrowth of two antecedent agencies, PSIC and SEPACT. PSIC was created six years ago by the city to assist ailing rail commuter operations of the PRR and Reading. The surrounding four suburban counties chipped in by creating SEPACT to do fundamentally the same thing.

It wasn't long before the need was recognized to organize this activity on a regional basis, which is how SEPTA was formed. The latter is a state body responsible to both the city and the suburbs for developing over-all mass transit plans for the region.

The next logical step seemed to be some form of integration or coordination between rail commuter and rail transit lines, which is what put SEPTA and PTC on a collision course.

With the present resolution of the dispute, local officials believe the actual SEPTA takeover could come about by September of this year, and construction of the new extensions may commence by the end of the year.

The two extensions of the Broad St. subway have top priority. Design work on the 6.4-mile northeast extension was done by Turnpike Engineers Inc., and on the 1.2-mile southward extension by DeLeuw, Cather, in a joint venture with Kuljian.

● **Median strip line.** The planned route for the Northeast Extension is for a spur to be built, leading off the present Broad St. line just north of the Erie Ave., station in subway. It will proceed under Hunting Park to Roosevelt Boulevard, then below the Boulevard for some distance, and south of Oxford Avenue emerge in the median strip of the Northeast Freeway, also planned for construction. The bulk of the route lies here.

The Northeast Freeway itself has

AT THE NUCLEUS: A HUD design award went to this plaza where transit lines intersect in downtown Philadelphia.

three northbound and three southbound lanes between 150-200 ft wide, with the double-tracked transit line occupying 24 ft in the middle.

Subway construction will be of reinforced concrete, except for a bored tunnel under Hunting Park.

Some 11 miles from city hall will be the Rhawn St. Station, terminus of the route, seventh and largest station on the line.

Here, it is planned to have a tri-level parking facility that can accommodate up to 2,500 automobiles. There will also be feeder bus lanes, and possibly an apartment complex as well.

Just before the turn into the Northeast Freeway is a Sears, Roebuck department store, where subterranean connections will made from the underground station directly into the store and to the adjoining parking lot, with facilities for about 450 cars.

The other Broad St. extension, a small one, will continue the present underground line from its terminus at Snyder Ave. on south to Pattison Ave., adjacent to one stadium and the site of another one. A bi-level terminal will be built here.

• **Cost—$109 million.** Four years ago, the city sponsored an $87.3-million bond issue to underwrite the cost of these two subway extensions. Local voters approved the bond issue, but questions surrounding the future of PTC and who was to have planning responsibility delayed further action.

With that affair now settled, the way is open to proceed with final design and construction. In the meantime, cost estimates have risen to about $109 million.

It is anticipated that federal, state and local matching funds can be found, since the bulk of the funding is already on hand and a unified planning activity can be demonstrated.

If construction does begin before the end of 1968, it is estimated that the extensions could both be in service by 1973.

• **Other plans.** Two more construction projects remain to be pursued. The airport extension is getting close attention from local officials because it promises to be a relatively straightforward affair that can be wrapped up quickly.

Penn Central and Reading trackage leading from PC's 30th St. station would be used most of the way, with a quarter mile of new track needed to form a spur to the airport.

On a preliminary basis, the estimate is that it would cost about $5 million. The Budd Co. has already come up with a vehicle concept for the line, and planners on the scene speak of its potential for handling mail and containerized freight.

Far more complex is the problem of the mid-city connection between the two rail commuter terminals. The project was studied six years ago, and plans were offered for a $45-million underground rail link.

Two factors have stymied the plan so far: lack of funds and lack of planning objectives that all parties could agree on.

In the past two years, however, a number of things have happened to help this project along. The City Planning Commission integrated the idea in its over-all plan for downtown (RA, March 4, p. 22), and the project also forms the keystone of SEPTA's 10-year master plan (RA, Sept. 26, 1966, p. 29).

At the same time, the Reading is proceeding with plans to abandon its present downtown terminal at Market St. and build a new one, so design of approaches must be firmed up.

While a federal matching grant of $23 million toward the cost of the connection has been hanging fire for some time, it is reasonable to assume that these factors will count toward an early resolution and some actual construction before long.

Edward Harvey, assistant general manager of SEPTA, pointed out recently that in 1960 the two commuter roads carried about 23 million passengers, and were registering a decline of about 4.5% annually.

Since then, the car-buying program and general upgrading of operations supported by PSIC, SEPACT and then SEPTA have resulted in traffic swinging up sharply.

In 1967, over 31 million passengers were carried, and the rate of growth is projected at between 3-5% annually.

(Just a week ago, SEPTA Chairman James McConnon announced that Penn Central would add nine new commuter trains immediately.)

A connection between the two commuter terminals would act to boost traffic still more, and serve the downtown area better. ■

Out of the doldrums for transit

"These are good times to be a transit man—and very good times to be a rail transit man."

So said F. Norman Hill, president of the American Transit Assn., at the opening session of the ATA's four-day Rail Transit Group meeting in Philadelphia.

Proof of the assertion came out in two ways: At the technical meetings, delegates from every major transit system in the U.S. and Canada delivered reports on current developments in cars, power supply, signaling and civil engineering.

Much more graphic was the demonstration of the Delaware River Port Authority's new transit cars and the first glimpse for many delegates of the DRPA's brand new line, opening late this year (see page 18).

Delegates were given a first-hand look at DRPA's shops, maintenance facilities, control center, passenger stations and a power sub-station.

• **No time for gloom.** Some well publicized setbacks for transit were put in their perspective by George DeMent, president of the Institute for Rapid Transit (which co-sponsored the meeting with ATA) and chairman of the Chicago Transit Board.

"I wonder if we realize how great the resurgence of rapid transit is," said DeMent.

"Actually, rapid transit construction and planning are at a higher level than most of us have ever seen. For example, of the existing rapid transit cities, New York, Boston, Philadelphia, Cleveland, Chicago and Toronto all have extensions now under construction.

• **More new systems.** Cities with active transit plans, DeMent said, include Atlanta, Baltimore, Los Angeles, Pittsburgh, St. Louis and Seattle.

Disappointments and setbacks there have been, of course. "But I'm not worried about the setbacks," DeMent said.

"Actually, this can be considered to be the normal process in bringing such undertakings to fruition."

DeMent recalled the many frustrations and delays encountered in his home territory in planning the CTA's two extensions along the Kennedy and Dan Ryan Expressways.

Perseverance, support from city hall, a local bond issue, and federal matching funds finally did the trick, he observed. ■

Joseph Asher's

TRANSIT ROUNDUP

ROADBLOCK IN ATLANTA: Although both houses of the state legislature passed by a wide margin a bill to aid the financing program of the Metropolitan Atlanta Rapid Transit Authority, Governor Lester Maddox vetoed it.

The bill was an amendment to previous legislation that would have lowered the cost of floating bonds for the projected transit system, and authorized a bond-issue referendum this fall.

MARTA officials acknowledged this was a big setback, but noted that the bill got excellent support from the state lawmakers and from the five participating local governments in the Atlanta region. They'll try some alternative tactic—and are still not ready to rule out a referendum this fall.

TRANSIT FOR COLUMBUS? Battelle Memorial Institute came up with a feasibility study that recommended overhauling the present bus system and reservation of rights of way for a future rapid transit system.

BALTIMORE LOOKS AT SKYBUS ROUTES: Since the decision by Baltimore officials to favor the Westinghouse Electric Skybus for a future transit system, earlier plans have been under steady review.

The area's mass transit steering committee proposed first phase construction of a line totaling 27 route miles leading from Randallstown across downtown to Harundale. Four additional lines would be phased in later, for a total of 71 route miles in the ultimate system. The first line might be ready for operation by 1974.

ON TO THE KANSAS CITY AIRPORT: Consultants W. C. Gilman & Co. recommended unification of local bus lines, purchase of new air conditioned buses, and consideration of certain-long-range transportation needs —among them airport access.

The Kansas City Area Transportation Authority, which commissioned the study, will investigate various high-volume methods of transporting passengers through the airport access corridor.

SOME ACTION IN WASHINGTON: Preliminary engineering work on the 25-mile basic system of the Washington Metropolitan Area Transit Authority has been extended to the entire 97-mile regional system.

Engineering consultants De Leuw, Cather were awarded a $408,500 contract to refine capital cost estimates and recommend a design and construction schedule. Architectural consultants Harry Weese & Associates received a $52,700 contract to prepare preliminary designs for the 55 additional stations (out of a total of 86) on the regional system.

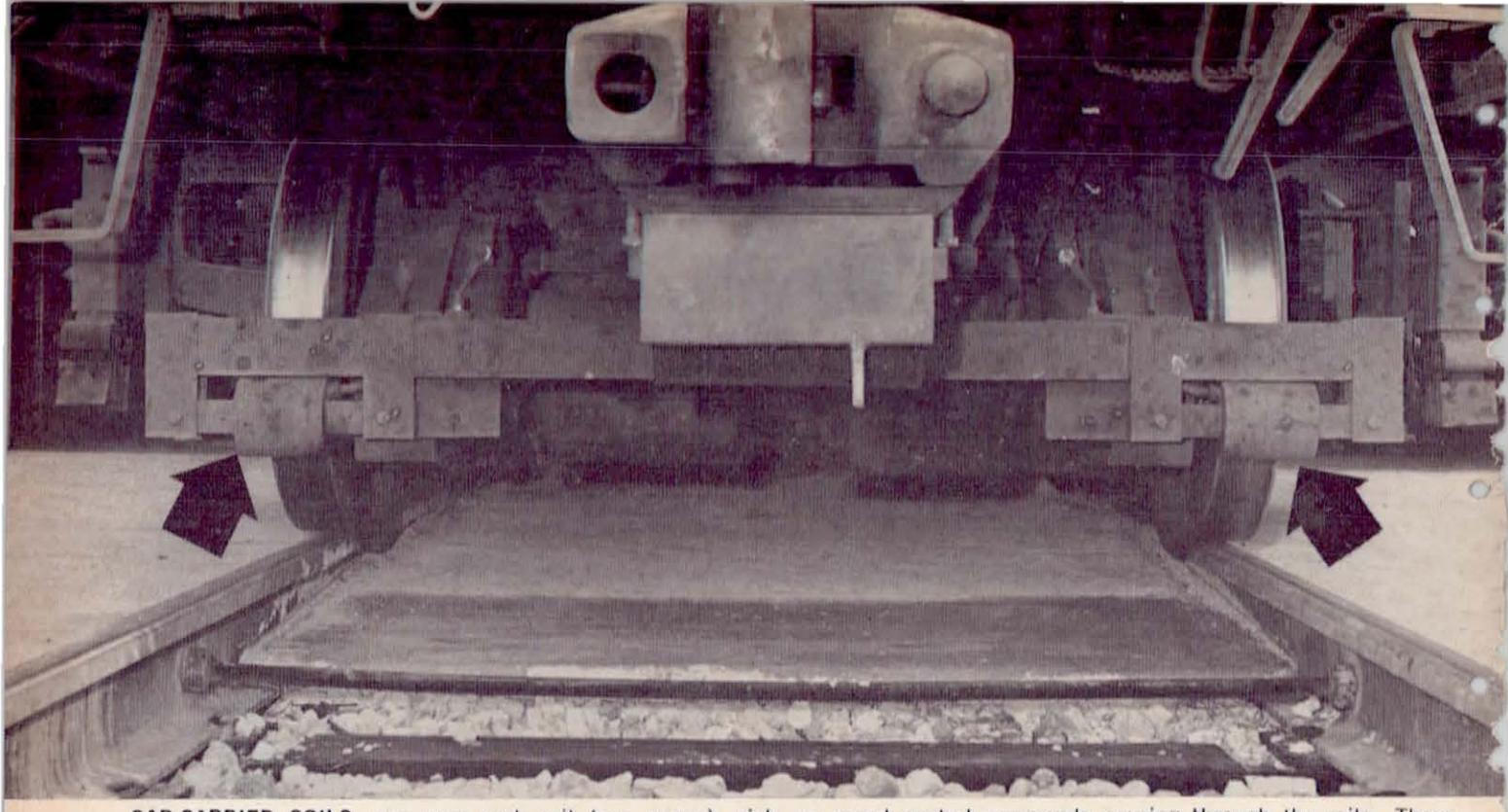
Meanwhile, consultants Louis T. Klauder & Associates and the design firm of Sundberg-Ferar were retained to design WMATA's transit cars. About 800 will be needed eventually.

PITTSBURGH GETS A STATE GRANT: Pennsylvania's Governor Raymond P. Shafer presented the Port Authority of Allegheny County (PAT) with a check for $400,000 to match local and federal funds, and further develop the Westinghouse Skybus on the South Park Transit Expressway. This becomes the second demonstration project for Skybus. In the first phase, operation will be made for revenue service.

WHY TRANSIT TO THE AIRPORT? The present terminal at Cleveland's Hopkins Airport was designed to handle 5,000-6,000 passengers daily. Yet the daily average was over 12,000 last year, and by 1970, according to Gaspare Corso, board member, Cleveland Transit System, that figure should be around 20,000.

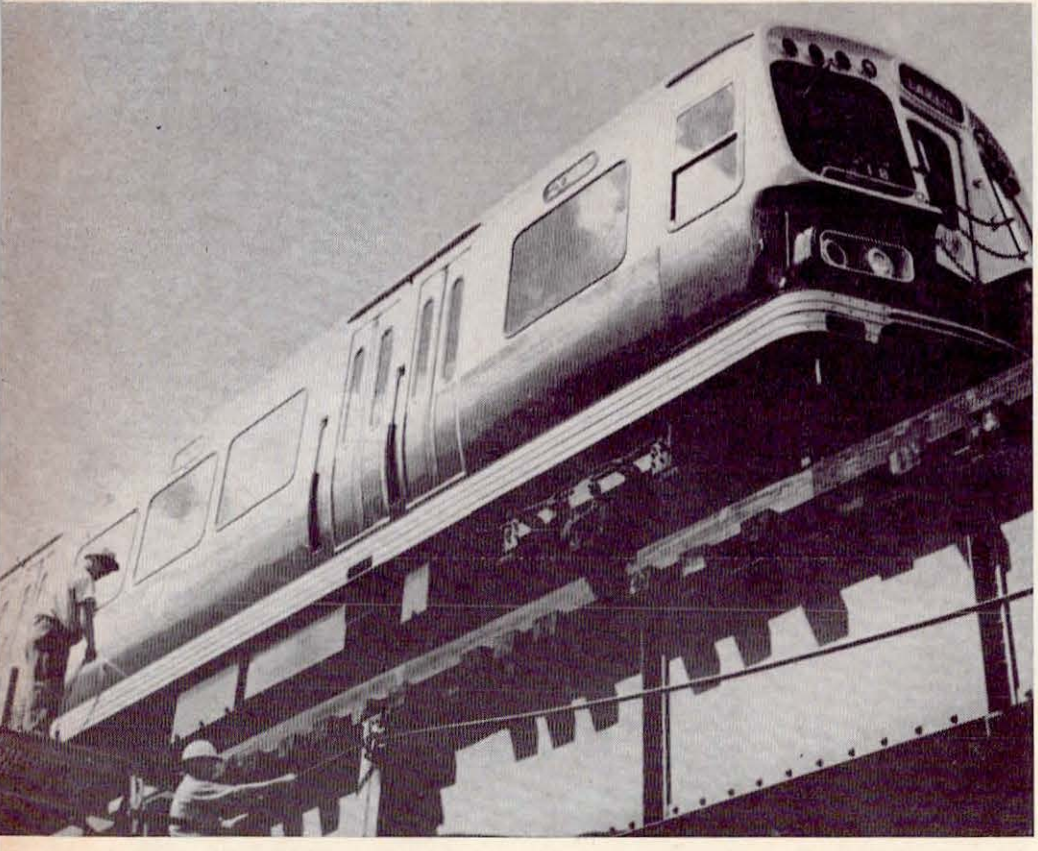
Under those circumstances, the new transit extension of CTS should be a big factor in reducing the need for additional parking spaces and highway lanes. CTS cars going into service later this year will have fast service right into the heart of town, and luggage racks (see photo) to make the transfer convenient as well as fast.

This will be all-weather service, it should be noted. Over a month ago, pea-soup fog tied up traffic on highways all over the area for hours. The Cleveland Plain Dealer noted that "the old reliable" transit systems got through with minimal delays, although jammed with hordes of motorists diverted from the highways to transit. "Road builders take note," said the paper.



CAR-CARRIED COILS, one over each rail (see arrows), pick up speed control commands running through the rails. These commands are electrical signals in the audio frequency range.

How CTA's new cab signaling



DATA LOGGING CABLE was strung along elevated structure to handle electrical signals from wayside equipment to track rails.

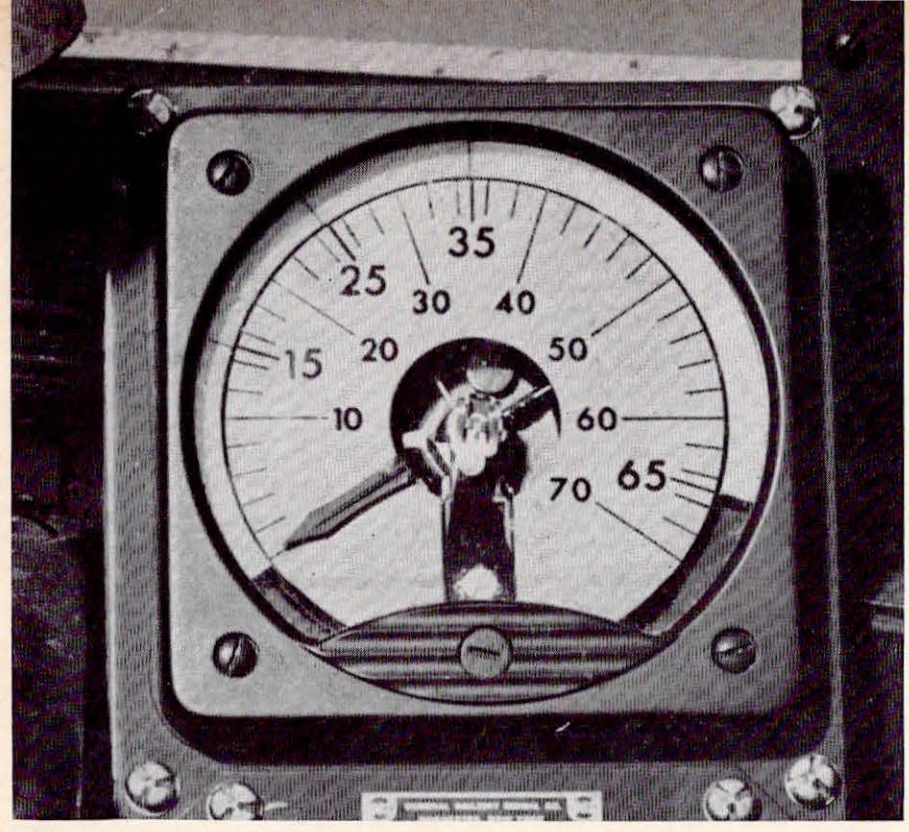
Some 80,000 Chicago rapid transit patrons ride daily to and from the Loop over the Chicago Transit Authority's Lake Street Elevated line. During rush hours, some 700-800 patrons ride the trains, on a 2.5-minute headway.

Hauling these passengers safely is a prime consideration of the CTA. Accordingly, the Authority has installed a $700,000 cab signaling and overspeed control system on the Lake Street El. (An additional $3.6-million contract for cab signaling and an automatic speed control system for CTA extensions was recently awarded, also to General Railway Signal Co.)

● **Commands from track.** Cab signal equipment has been installed on 140 cars and along the wayside of the 9-mile double-track line. This control system differs from those used on other transit lines. It uses audio frequency track circuits to carry information and instructions directly to the motorman. The system eliminates the need for wayside signals and insulated joints.

The signal commands are shown continuously as lighted segments around the speedometer in the motorman's cab.

Also provided is a cab signal cutout indication when trains are operating outside cab signal territory, as, for instance, around Chicago's Loop. This cab signal cutout indication is shown



ARC OF LIGHTS around the speedometer tell the motorman the maximum speed at which he may operate his train.

system works

by a lunar white arc-of-light around the speedometer. If the motorman exceeds the allowed speed, or should he fail to reduce speed when required, the automatic control takes over and brings the train to a complete stop. When a stop command is displayed, an absolute stop is enforced before low speed operation is permitted.

● **Track circuits.** Each track circuit consists of a transmitter, receiver, a track relay and a new type of impedance bond called a Wee Z bond. The function of this bond is to couple information between the rails and the wayside equipment, and determine block limits. These bonds are mounted between the ties.

All other wayside equipment (for generating the audio frequency electrical signals carried in the rails) is in central housings at station platforms. Multi-conductor data logging cable, made by Anaconda Wire & Cable Co., was strung along the elevated structure and along the right-of-way to carry signals from wayside equipment to the rails at ends of blocks.

Each transmitter for each track circuit generates carrier frequencies, which are used for train detection and the transmission of speed commands to the train. The four carrier frequencies used are in the audio range of the proper speed command to the train, including the cab signal cutout command at the entrance to non-cab signaling territory.

The wayside, as well as the car-carried, equipment was furnished by General Railway Signal Co. The equipment on each car pair includes four receiving coils (two mounted on each end of the car pair), a speed detector, a set of electronic and relay logic equipment and the cab signal indicator units associated with the speedometers. The receiving coils are inductively coupled to the track, receiving carrier energy from the rails.

● **Three critical speeds.** Three compulsory speed limits are used for following train protection: 65 mph, 35 mph, and stop and proceed at 15 mph. When a 65-mph signal is received from the wayside equipment, the green cab signal is illuminated and the arc-of-light segments around the speedometer dial are illuminated from 0 to 65 mph, the maximum permissible speed. As long as the speed is below 65 mph, operation of the train is under the control of the motorman.

If the speed exceeds 65 mph, the warning bell sounds, notifying the motorman that he has 2.5 seconds to move the cineston handle to brake. When the controller is placed in the brake position, the bell stops ringing. As the speed reduces below 65 mph, the motorman can release the brakes and resume normal operation.

If the motorman does not move the controller to the reduced speed position within the 2.5 seconds allowed, the speed control system automatically makes an emergency brake application, using dynamic and friction brakes to bring the train to a stop, and the bell continues to ring.

After the train stops, the motorman can regain control by placing the cineston handle in the B36 position until the bell stops ringing. He can then operate normally.

If the speed signal changes from 65 to 35 mph, within two seconds the green cab signal goes out and the yellow light goes on. The speedometer shows a lighted arc from 0 to 35 mph. and the procedure is similar to that described above.

● **Stop indication.** In the absence of the three signals—65 mph, 35 mph and 15 mph—the speedometer shows no lighted arc, the green and yellow cab signal lamps are out, and only the red signal lamp is illuminated. This is the stop indication. The warning bell sounds, indicating to the motorman that he has 2.5 seconds to place the controller handle in a brake position.

If within the 2.5-second period, he does not place the controller handle in the brake position, the emergency penalty brake application results. After the required stop has been made, the red cab signal lamp and the speedometer 0-to-15 mph arc begins to flash, indicating that he may now proceed at a maximum speed of 15 mph, according to the rules. If 15 mph is exceeded, the bell sounds, warning the motorman that he has 2.5 seconds to forestall an emergency brake application.

● **Low speed to high speed.** When the speed signal changes from a lower to a higher speed, the cab signal indicates the new higher speed. The speed control system permits the motorman to accelerate to the new speed limit. Thus, for example, when the 35-mph signal is received, the yellow lamp and the 0 to 35-mph speedometer arc light up. Within 2 seconds after receipt of a 65-mph signal, the yellow light goes out, and the green light and the 0 to 65-mph speedometer arc lights are illuminated, indicating to the motorman that he may increase train speed to 65 mph.

When the train leaves cab signal territory, the red, yellow and green indicators are extinguished and a lunar white indicator cab signal cutout is lighted. Under these conditions, no speed control is enforced by the cab signal system. Upon re-entering cab signal territory, the cab signal cutout indication is extinguished and cab signal indications are received. ■

Train and bus stop

Among suggestions for suburban "commuter convenience centers" is multi-level facility (right) which incorporates rail and bus station and parking.

C&NW looks at commuter parking

Attracting new riders to mass transport facilities involves expansion and development of areas for parking automobiles.

It's the common, everyday things that often disrupt great plans — and for Chicago & North Western one of the main obstacles in the way of continued commuter-traffic growth is the simple problem of commuter parking.

North Western, however, may have the answer: Construction of multi-level parking facilities in "commuter convenience centers" at major stations on the three-route system. The railroad, in this case, is acting as promoter, not as entrepreneur. The commuter centers would be built by the local communities involved. Key to the program would be federal participation, to the extent of two-thirds of the cost.

• **Parking: In a bind.** C&NW Chairman Ben W. Heineman points out that the railroad "for years has sought to expand parking facilities at suburban stations, working cooperatively with community officials. Some progress has been made. But prospects for further expansion are severely limited, without going to multi-level facilities — which, until now, no local community could afford to build."

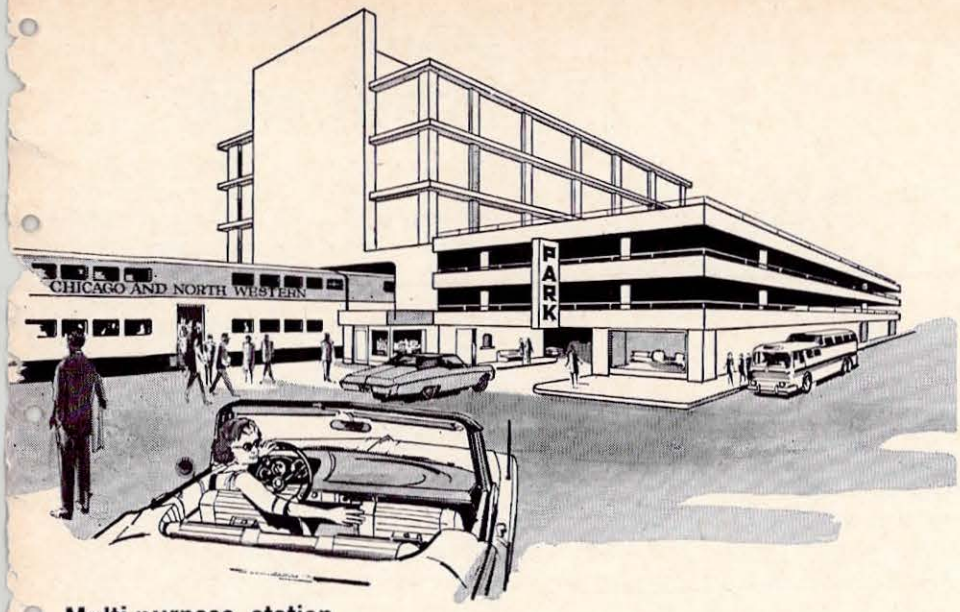
North Western's new proposal takes into account the Urban Transportation Administration's recognition that parking expansion and development are vital elements in attracting new riders to mass transportation. Parking facilities are eligible for capital grants—and it's on this basis that the centers may be built, with the federal government putting up most of the money and the local community supplying the rest. (C&NW notes that under terms of the 1964 Urban Mass Transportation Act, local matching funds must be provided by local governments or other official governmental bodies and cannot be furnished by transportation companies.)

Thus far, local reaction to the idea has been good. Railroad management, Heineman says, "is currently working with and urging officials of our many suburban communities to apply for such federal assistance. For its part, the railroad will actively and energetically support these applications with documentary evidence of the vital need for expanded parking at each location. Several large suburban communities have already expressed their keen interest in such a plan."

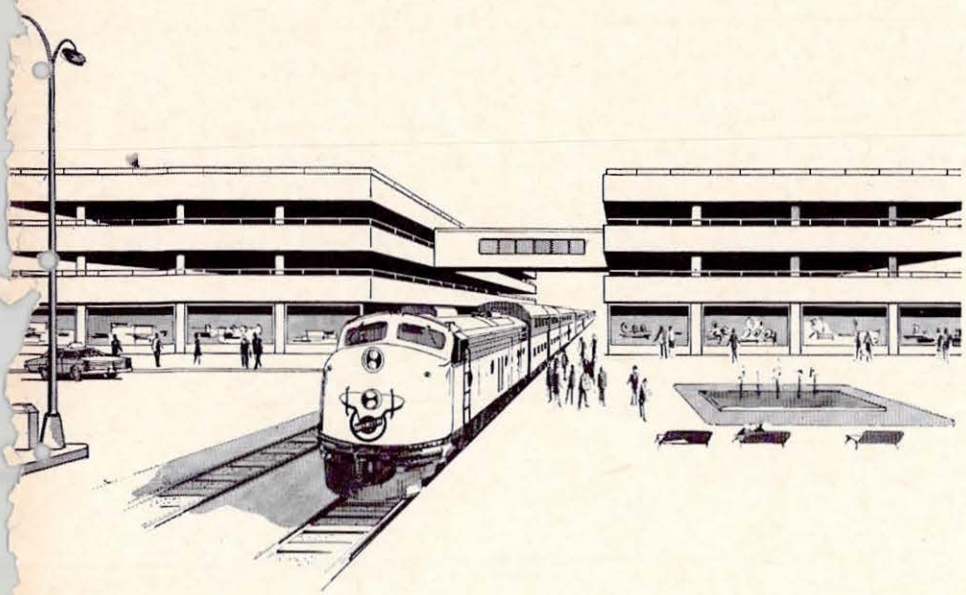
• **Not just garages.** North Western sees the centers as far more than mere storage buildings for all-day parking of commuters' cars. Railway, local bus and taxi operations might be consolidated into a local transportation center. Short-term parking for shoppers might be provided at street-level. Shopping facilities, even office space, might be incorporated in the design.

The problem in the suburbs is basically one of space, complicated by growth. In almost every instance, existing commuter parking facilities are at grade-level, in the center of already-congested community business districts. These lots have been expanded, but, Heineman says, "a great many suburbs have simply run out of available land for additional parking spaces. And where land is still vacant, it is far too limited in size or too expensive for the community to provide any meaningful expansion of parking space. Then, the problem is compounded by the fact that as the communities grow in population density, new residential areas are built in the peripheral areas with the result that more and more train commuters must drive to the railroad station."

North Western is now carrying more than 84,000 riders daily. Since 1956 it has invested more than $58 million in new equipment and in other service and facilities improvements. But, Heineman declares, "without adequate parking, low-cost suburban rail service cannot continue to grow."



Multi-purpose station
Station facilities, shops, commuter parking and short-term shopper parking would be provided in structure (above) alongside and over tracks.



A track straddler
Design above would have station on both sides of the track, with pedestrian walkways connecting separate buildings.

Among C&NW's other concerns in the program: Cost — and aesthetics.

• **Who pays — and how much!** Studies have indicated, Heineman recalls, that with 300 square feet of space provided for each car, the cost of building multi-level facilities with user-fees alone would dictate a minimum daily parking fee that might well exceed the cost of the train trip:

"Obviously, a daily parking rate of 75 cents to $1 would be a deterrent to train commuting. But if two-thirds of the cost can be defrayed by a federal grant, it would be economically feasible, we believe, for the local community to build and operate such a facility with nominal fees, to attract maximum usage. The matching one-third of the cost to be provided by the local community can be raised through revenue bonds, to be retired solely through user parking fees. Parking fee collection for the communities would also be vastly simplified. Instead of costly meters, the controlled access created by multi-level structures simplifies fee parking through use of less costly gates installed at entry or exit points."

• **Things of beauty?** As for the building design, North Western is well aware that "no communities would want to construct multi-level parking structures that would be an eyesore in the center of the suburb. Facilities constructed must be aesthetically pleasing —and, in fact, many already exist in the city of Chicago. We envision some cases where the commuter convenience center could be constructed over the railroad tracks on North Western's air rights. Station waiting rooms could be built over the tracks, with escalators down to the platform. Such design would automatically solve the problems of weather protection for train and bus commuters and would make their cars more accessible to commuters who park on the upper levels of the garage."

Heineman emphasizes that C&NW's plans tie in directly with the so-called finger-plan of land use recently adopted by the Northeastern Illinois Planning Commission. The finger-plan concept envisions corridors of growth, both residential and commercial, along existing rail and expressway routes. It also foresees high residential development near rail stations and great emphasis on increasing use of existing rail commuter service between suburbs and city.

• **Keeping the lead.** As North Western's chairman sums it up, "our concept would mesh with developments already undertaken by the city of Chicago for more efficient distribution of people within the central business district, through increasing use of mass transportation. This commuter convenience center plan doesn't just contemplate one or two parking-facility developments, but rather the area-wide development of such facilities in each major community.

"Chicago is now and always has been a leader in mass-transit innovation. The Chicago metropolitan area currently enjoys the reputation of possessing the nation's finest suburban transportation system. In our judgment, the construction by local communities of such centers through this system will benefit not only those local communities but also the entire metropolitan region and particularly the central business district of Chicago. It will not only help preserve the region's already fine commuter service but also immeasurably increase the efficiency and the potential of that service in years to come. ■

WALTER TAFT

WATCHING WASHINGTON

COMMON OWNERSHIP AGAIN—Common ownership of transport modes is like the weather in this respect: There is much talk about it, but nobody seems to do anything about it. Common ownership is what the railroad industry also calls diversification, which means freedom for any mode to operate other modes. A bid for such freedom has long been a priority item on the railroads' legislative program. And the industry still thinks it is the soundest approach to transport coordination.

MORE TALK—The latest authoritative discussion of the matter has come from Chairman Paul J. Tierney of the ICC. While he adheres to a neutral position (which is also the Commission's official stance), his comment should be comforting to the railroads. He speaks of a "swelling support for common ownership," which "is no longer confined to a single mode or financial interests." Tierney goes on to emphasize, however, that the advocates of common ownership are still a minority voice.

BOYD STARTED IT—He recalls, nevertheless, that Secretary of Transportation Alan S. Boyd (also a neutral) said last year that common ownership is not a matter forbidden to contemplation. As Tierney interprets it, this Boyd statement "typified a new era" in the government's attitude, showing "a marked change from the late Fifties when the discussion of common ownership was basically a debate between railroads and other modes."

WARNING—The ICC chairman hastens to warn proponents of common ownership—"particularly the railroads"—that they "will have to display convincing proof that policy changes encouraging greater integration will produce major benefits to the public, and are not desired mainly for the egocentric interests of strengthening a particular mode."

CONGRESSIONAL ACTION REQUIRED—Relief will have to come from Congress. The regulatory agencies seem to have used their discretionary power in this area to resolve all doubts against the railroads. The ICC usually finds that railroad applicants for authority to operate trucking or water-carrier services have failed to make the special showings now required by the Interstate Commerce Act. And the Civil Aeronautics Board has interpreted like provisions of the Federal Aviation Act in a way which bars railroads from operation of air lines.

South Jersey transit cars

(Continued from page 20)

rail is installed in standard lengths and then field welded into continuous strips.

• **Construction near end.** Impressive quantities of materials are required for the project—over 350,000 cubic yards of concrete, 9,200 tons of steel, 230,000 feet of pipe and 26,000 yards of paving.

Johnston reports that construction is now 75% complete and that the final phase of track laying will get under way shortly.

Work on the central control facility at Camden is well advanced. It is there that line supervision, train dispatching and power dispatching will be carried on. From Camden there will be voice communication with all train operators, passengers and stations. Closed-circuit TV will also connect this facility with the stations and their automatic fare collection equipment, now being built by Advanced Data Systems.

Magnetic encoded tickets, dispensed by vending machines, will be used for entering and exiting through the ADS automatic gates. A zone fare system will involve single- and multiple-ride tickets varying in dime increments from 25 to 55 cents.

Johnston calls DRPA's automatic fare collection a "simplified" version of that now in use on Illinois Central's Chicago suburban lines.

Rush-hour train service is projected at 6-minute intervals from the end of the line at Lindenwold; every 4 minutes from Haddonfield, which is over nine miles from downtown Philadelphia; and on 2-minute headways from Ferry Avenue at the Camden city line. Such service involves turn-back sidings at two points on the double-track line and requires that trains have an adjustable Identra installation for automatic route selection.

The Identra selector in the cab also sets all the train signs through one of the multiple-unit control circuits.

Not everything is resolved. Due soon is a study of the coordination of DRPA trains with local bus operations. Far in the future could be line extensions toward Mt. Holly and Glassboro, N.J. Already the towns on the Lindenwold line are experiencing the real estate boom which good transit service can produce. And early next year an expected 60,000 passengers daily will have a fast, safe, comfortable and economical means of travel between South Jersey and Philadelphia. ■

LETTERS

Grain shipments and L&D

New York, N.Y.

To the Editor:

The March 25 issue of Railway Age [p. 94] carries a letter from H. N. Johnson, Ralston Purina Company, regarding equipment and claim problems involved with grain shipments.

Let us be the first to agree that a few of the box cars offered for grain loading are not in prime condition for hauling the commodity. We are acutely aware of this problem—and the railroads have greatly expanded their covered-hopper-car grain fleet, most of which has been built during the last three years.

We believe the most effective way to combat this problem will be to continue to add covered hopper cars to our fleet as our financial resources permit. Unfortunately, no railroad owns sufficient covered hopper cars today to handle the grain offered it during certain seasonal peaks. And it is obvious that box-car shipments of grain will continue for some time to come.

We agree that carriers and shippers have a joint responsibility in reducing loss and damage. We are confident that all railroads are spending sizable amounts of capital to upgrade their equipment.

We certainly appreciate the efforts of the American Feed Manufacturers Association in conducting sessions to stress the importance of proper weighing procedures as a vital factor in claim reduction. Proper weighing procedures should significantly reduce the incidence of loss-and-damage claims. We urge all grain shippers to follow the suggestions at the AFMA sessions.

G. J. Keyes
Manager
Eastern Weighing and Inspection Bureau

Rail passenger service

Evansville, Indiana

To the Editor:

If the average rail-passenger executive would swing around from his roll-top desk and plant his feet on his spittoon littered floor, walk over to his grimy office window and actually look out, he would be completely awed to find that he is now living in the twentieth century and that the inhabitants concerned with running things, especially some mode of passenger transport, are using such tools as "Madison Avenue," market research, courtesy, efficiency, economy, etc., to achieve their ends.

And he might also be interested to know that the reason other people are doing what he once did, is that he absolutely will not employ their tools. Rather, he will keep slowing down his service, make sure that his trains cease to run on time, insure himself that his service is provided in filthy, antiquated equipment and make certain that every inefficiency possible is utilized—e.g., why do six passenger stations still exist in Chicago?

All of this sounds fairly extreme, I'll admit. But I'll also attest to the fact that it is also true. I know. I've ridden on at least twenty railroads, worked for one, and talked with dozens of rail executives.

Yet, where were all of those "millions upon millions" for advertising spent, that Gus Welty expanded upon in his glorious article in the April 8 issue? Only Seaboard Coast Line and Santa Fe advertise for passenger business. And wasn't it just recently that your journal bemoaned the fact that United Air Lines spends more on advertising than the whole railroad industry combined? Why wasn't the Canadian National mentioned?

Not only have they substantially increased business but costs are going down and they expect to eradicate their deficit in a few more years. Railway Age said this, too.

And I defy any railroad other than Canadian National, Seaboard, or Santa Fe to tell me what they've done to constructively improve service.

Yet, the tragedy of the whole thing is that in spite of it all, the rail-passenger executive just can't understand where the business went. Maybe he should use some of his tears to wash the grime off his office window.

Robert T. Pernau

The real solution

Chicago, Illinois

To the Editor:

What's the *real* solution to the economic problems of the long-haul passenger service?

We suggest the following:

—Improve equipment utilization by establishing a national car pool.

—Lower repair costs by having the pool organization construct one or two really modern car shops, and then concentrating all repair and rehabilitation work therein.

—Lower repair and maintenance costs by a well-conceived program of equipment rebuilding and replacement.

—Lower joint terminal costs by the elimination of inefficient and wasteful practices. Perhaps this would be facilitated were joint terminals operated by the pool organization.

—Increase revenues and lower overall operating costs by restructuring the present pattern of service so that trains are concentrated on those routes with maximum potential for tourist and vacation travel.

—Increase revenues by establishing a centralized, computerized reservation system, so that no one is turned away if in fact there is space available for him.

—Increase revenues by an all-out national promotional campaign in coordination with the travel industry.

With all these and other possibilities as yet unexplored, we will resist to the full extent of our resources the total discontinuance of long-distance passenger service.

Anthony Haswell
Executive Director
National Association of Railroad Passengers

Railroads and publicity

Seattle, Wash.

To the Editor:

AAR's Tom Goodfellow is very wise in pointing out that the publicity for the upcoming Golden Spike centenary must be handled skillfully [RA, March 25, p. 52]. It must be realized that, eleven years after Sputnik, the public has become *bored* with the Space Age and its trappings. TV audiences for the Gemini launchings have decreased steadily. Computers are commonplace in many businesses, second-generation diesels aren't as pretty as the first, and a string of TOFCs and Big Johns may be exciting to a railroad man, but they're a crashing bore to the layman. Editorial cynics will also gleefully point out that 1969 is the first anniversary of the attempt to abandon the sole remaining passenger train on the Overland route.

The railroads do have one very good thing going for them, however, and that is a long, romantic tradition which is still deeply rooted in American culture. Even today, when "My baby's going away" in the lyrics of a rock song, chances are that she goes on the Midnight Special, even though the youthful writers have probably never seen a passenger train, let alone ridden one.

If the railroads want to generate a significant amount of publicity to remind people that they're still around, they're going to have to use the cinders-and-smoke approach, because if they parade all the modern gadgets that warm the hearts of the cost accountants, they'll be greeted by a massive chorus of yawns from the public.

Frank Heppner
Acting Assistant Professor of Zoology
University of Washington

LUTHER MILLER

AS THE EDITOR SEES IT

NO MORE CRYING TOWELS, BUT . . .—Railroads have often been accused of indulging in what has been described as "management by crying towel." Too often (the critics mourn) railroads have tried to cope with competition by trying to uninvent the internal combustion engine and the airplane—or failing that, to legislate them out of existence. Today's "new breed" railroaders are stung by such criticism, and properly so. The crying towel has been laid away. The Kleenex corps has been replaced by an army of marketing men—and this is as it should be.

CALL IT RIGHTEOUS INDIGNATION—But this does not mean that injustices do not persist—and this magazine, for one, will continue to record them. At hand this week is a fat document from the Federal Aviation Administration entitled "Federal-Aid Airport Program for FY 1969"—or, in FAA's own expressive acronym, "FAAP." We publicize this document here for two reasons. (1) Nobody else is likely to, government handouts to the air industry having become so routine that they are scarcely worthy of an editor's attention; and (2) the FAAP allocations have a timely relevance, in view of ICC Examiner John S. Messer's recent comments (RA, April 29, p. 48) on the Southern Pacific's "Sunset Limited," a train that journeys through some choice FAAP territory.

THE NEWS FROM FAAP—FAA's announcement is simple: It is allocating $74.7 million in fiscal '69 for "the construction and improvement" of 397 airports across the land. Most of the remainder of the 89 pages is taken up with a state-by-state, city-by-city listing of how this largesse will be distributed. But isn't this $74.7 million recoverable in some way? There's nothing in the law that says that one penny has to be returned to the Federal Government. Airport fees go to the municipalities (which put up matching funds).

ENTER THE "SUNSET"—Examiner Messer's report on passenger trains (in which railroad management was lambasted for its failure to provide adequate service) was set off by the deterioration of SP's "Sunset Limited." It is a matter of more than passing interest, we suggest, that (1) the airplane has siphoned off a lot of the "Sunset's" business and (2) eight of the cities on the "Sunset" route will get, in fiscal '69, $3,282,102 in federal airport aid. That's about $1,300,000 more than Examiner Messer figures to be the "Sunset's" annual deficit. Any railroad man who hasn't got one ought to write to FAA (Washington, D. C. 20590) for a copy of the FAAP report—and do the arithmetic for his own area.

Heineman's "real issue" in RI merger

Secrets, in the railroad business, tend to leak out. One that did not was sprung suddenly last week, as Chicago & North Western Chairman Ben. W. Heineman took the stand once again in the Rock Island merger case.

The thrust of his testimony: That a series of specific suggestions for settling the long controversy had been made—all to no avail—in an extended series of discussions involving, at one point or another, C&NW, Union Pacific, Southern Pacific and Santa Fe.

Proposals considered, Heineman said, were these:

—C&NW to complete formation of a regional carrier through merger; UP, through acquisition of warrants or options, to reserve the opportunity to obtain control of the regional line at a later date.

—UP to acquire transportation assets of C&NW and assume its obligations to merge with Chicago Great Western and Milwaukee, in exchange for UP stock; or, C&NW to acquire all the transportation assets of UP, in exchange for C&NW stock.

—UP to gain its desired Chicago entry through merger with Illinois Central instead of Rock Island.

—C&NW, UP, SP and ATSF to acquire interim joint control of RI to provide it with needed financial aid.

As Heineman summed up the results, UP regarded the warrant or option arrangement as not feasible; UP showed no interest in a buy-or-sell agreement; both sides cooled on a settlement involving UP acquisition of IC or IC plus Gulf, Mobile & Ohio; and the interim joint control plan was deemed "simply not workable."

C&NW's chairman wound up with a look at what he termed the "real issue" in the RI case "How the rail system in the Western District will appear and function in five or 10 or 15 years." He made another plea for the regional, building-block concept of merger, to create railroads "which can at once act as efficient components in the national transportation system and at the same time insure that all areas of the Western District receive modern transportation service. The alternative is the development of the new rail system through private economic warfare, with the victors emerging as overwhelmingly dominant and the losers emerging as hopelessly weakened." ■

D. F. Wengert
UP

John C. Kenefick
UP

PEOPLE

JERSEY CENTRAL.—Clifford S. Strang, director labor relations, Newark, N.J., named director of employee relations, heading the department established April 1 through combination of the personnel and labor relations departments. **J. T. Veal,** manager personnel, and **W. E. Federkeil,** assistant director labor relations, will assist Mr. Strang as managers of employee relations.

SOUTHERN.—George S. Paul, group vice president of administration, **Chicago & North Western,** Chicago, appointed vice president—personnel, Southern, Washington, succeeding **Lawson G. Tolleson,** who retired April 1 after more than 43 years of service. Mr. Tolleson will continue as a consultant.

Other April 1 retirements: **George M. Lawrence,** regional manager—passenger sales, and **N. Bradford Ballinger,** manager—passenger services, Atlanta; **William L. Daly,** district manager—passenger sales, Cincinnati, Ohio; and **Jesse O. McCollum,** district manager—passenger sales, Asheville, N.C.

Ronald W. Torrence has been appointed financial analyst, Washington. He was formerly employed by the Small Business Administration there.

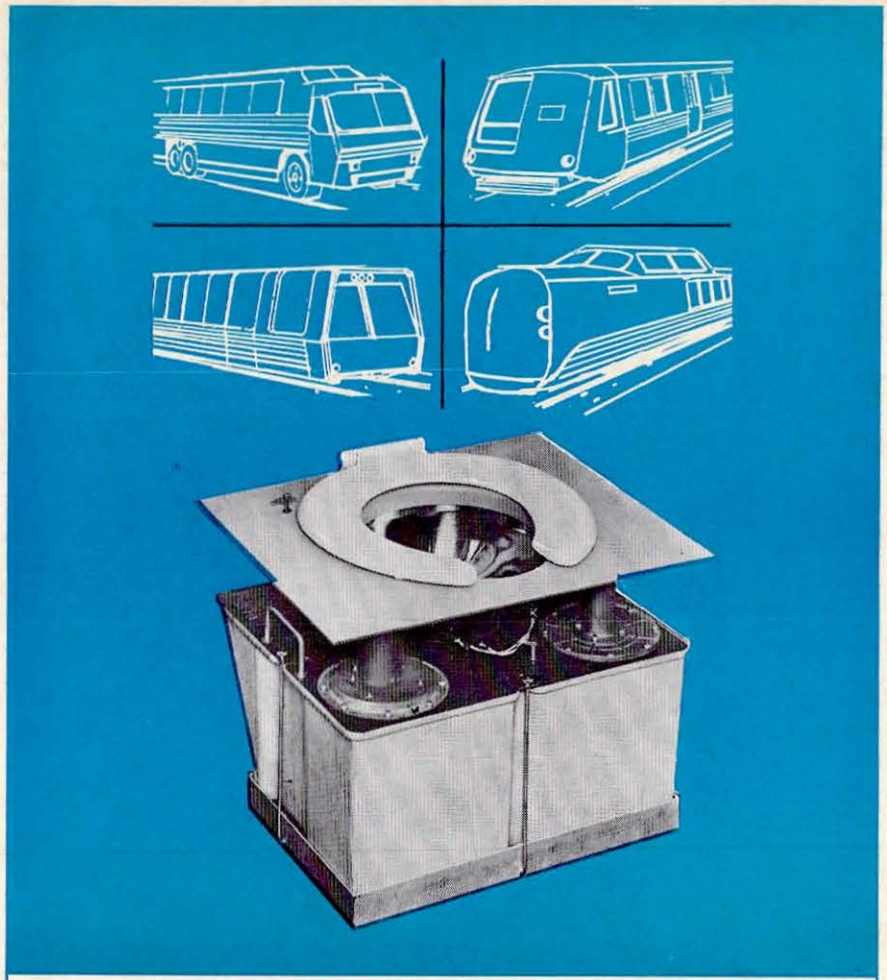
SOUTHERN PACIFIC.—Edgar A. McDowell, assistant to the president, retired April 30 after more than 41 years of service.

W. M. Clayton, Jr., assistant to general freight agent, Houston, appointed assistant general freight agent there. **D. L. Buckner** succeeds Mr. Clayton.

UNION PACIFIC.—D. F. Wengert, vice president-operations, Omaha, named to the newly created position of assistant chief executive officer-transportation division (RA, April 22, p. 36). **John C. Kenefick,** formerly vice president-transportation, **Penn Central,** named to succeed Mr. Wengert. Both appointments were effective May 1. **William J. Fox,** Northwestern district general superintendent, Portland, Ore., appointed assistant vice president-operations. Mr. Fox's successor is **Wallace R. Tuel,** superintendent, Nebraska division. **Charles C. Larkin,** superintendent, Utah division, Salt Lake City, named assistant to the vice president-operations, Omaha.

WESTERN MARYLAND.—On April 1 moved its headquarters in Baltimore, Md., to the new Arlington Building, 201 North Charles Street.

Linwood W. Jenkins, assistant office manager, rate department, named assistant to the manager of pricing, Baltimore.



The New Travel Era demands the ultimate in passenger comfort

Your passengers deserve the maximum in convenience and comfort . . . the new Monogram railcar/bus flushing toilet. A fully automatic, electric unit, completely self-contained, small and compact, it can be installed in any space configuration. Quiet. Odorless. A strong, swirling action empties the bowl thoroughly, quietly in just 10 seconds. Water is then chemically treated and deodorized, filtered and recirculated. Requires no separate water supply or holding tank. The same dependable Monogram system used by virtually all jet airlines the world over. Send for brochure.

MONOGRAM
RECIRCULATING
FLUSHING TOILETS

MONOGRAM INDUSTRIES, INC., VENICE DIVISION
3226 Thatcher, Venice, Calif. 90291 • Phone: (213) 870-8772

Circle 9 on coupon page 38

Freight and Passenger Car Charts

These charts are very helpful to AAR billing clerks, mechanical engineers, purchasing and stores personnel, car inspectors, write-up men, car foremen, and anyone else who needs a knowledge of car parts and their relation to each other.

The charts include a cutaway diagram of the car and a listing of important parts with arrows showing where each is located. These charts are a part of standard training programs used on a number of major railroads.

$2 each

$10 for any six

If you are not satisfied

YOUR MONEY WILL BE REFUNDED

if you return the charts to us within 30 days

THE RAILWAY EDUCATIONAL BUREAU
1809 CAPITOL AVENUE
OMAHA 2, NEBRASKA

Please send the charts I have checked below. If I am not satisfied I will return the charts within 30 days for a full refund. I enclose a check or money order for $2.00 for each chart or $10.00 for any six charts.

- ☐ Streamlined light weight passenger car (16x25 inches)
- ☐ Covered hopper car (20x30 inches)
- ☐ Box car, AAR standard 40 ft. (23x25 inches)
- ☐ Air conditioned chair car, 1930 design (18x35 inches)
- ☐ Tank Car (22x35 inches)
- ☐ Refrigerator Car, wood sheathed, steel underframe, 1920 design (14x20 inches)

5/6/68

Name _____

Address _____

City _____ State _____

_____ RR _____

Herbert E. Markley
Timken

W. R. Timken, Jr.
Timken

J. F. Toot, Jr.
Timken

James A. Oaks
Timken

SUPPLY TRADE

Herbert E. Markley, executive vice president, **Timken Roller Bearing Co.,** Canton, Ohio, elected president, succeeding **W. R. Timken,** who remains chairman of the board.

W. R. Timken, Jr., director of corporate development, and **J. F. Toot, Jr.,** vice president, international division, elected corporate vice presidents. They will serve as assistants to Mr. Markley, in addition to continuing work in their respective fields.

James A. Oaks, assistant advertising manager, **Timken Roller Bearing Co.,** Canton, Ohio, has been promoted to advertising manager, succeeding **Donald L. Hart,** named director of sales, Timken—Europe.

William J. Hedley, former assistant vice president, **Norfolk & Western,** has been named special railroad consultant to the firm of **Sverdrup & Parcel and Associates, Inc.,** engineers-architects, St. Louis, Mo.

Rudolph Smith, chairman of the board, **CF&I Steel Corp.,** Denver, Colo., retired April 1 after almost 41 years of service.

Max Bauer, chief engineer, **Railway Maintenance Corp.,** Pittsburgh, has been appointed to the newly created post of assistant to the vice president—production and engineering. **Rudy Martineck** has been advanced to chief engineer.

The **Pittsburgh Plate Glass Co.** on April 1 officially, changed its name to **PPG Industries, Inc.**

Robert Ernst has been named eastern regional manager, Transportation Products Division, **National Steel Corp.,** at Philadelphia. Mr. Ernst was formerly eastern district sales representative, Standard Railway Equipment Manufacturing Division of **Stanray Corp.,** at New York.

Thomas P. Glaser, product supervisor, **Pullman-Standard Division** of **Pullman Incorporated,** has been appointed manager, marketing administration.

The Chicago office of **Davis Brake Beam Co.** moved to 222 W. Adams Street. **Robert E. Mann** has been named Chicago district representative.

The Mid-Control Co. has moved to a new sales office at 770 Lee Street, Des Plaines, Ill.

Robert E. Bain has been appointed western sales manager, **Berwick Forge & Fabricating Corp.,** Chicago. Mr. Bain previously served as manager, engineering sales, **Keystone Railway Equipment Co.**

The **Standard Steel Division, Baldwin-Lima-Hamilton Corp.,** has been realigned. **Richard J. Quilter** has been appointed manager of transportation sales at Burnham, Pa., reporting directly to **John O. White, Jr.,** manager of marketing. Mr. Quilter has been manager of transportation sales, working out of the Chicago sales office, where he directed the field sales representatives. At Burnham he will also direct the administrative organization to support the field forces. **Thomas H. Garrett,** assistant general sales manager, has been named manager of transportation sales administration, reporting to Mr. Quilter.

Neil G. Johnson has been named marketing manager—midwest, **Transport Leasing** division of **Pullman Incorporated.** Mr. Johnson, who was account representative, will continue to report to **Hugh W. Foster,** vice president—marketing. Before going to Transport Leasing Mr. Johnson was assistant to the freight traffic manager, **Milwaukee.**

Robert H. Burton has been appointed to the engineering staff, Signaling & Communications division, **Western Railroad Supply Co.,** Chicago. In addition to sales, his work will include development of new products.

William Reinhardt has been appointed manager—railroad products division, **Racine Hydraulics, Inc.,** Racine, Wis.

John F. Miefert, general factory manager, **Ohio Brass Co.,** Mansfield, Ohio, has been advanced to vice president—manufacturing. **Douglas E. Winters,** executive engineer, has been named vice president—engineering. **Bernard H. Little,** secretary-treasurer, has been appointed vice president—finance, secretary and treasurer. **Joseph T. Lusignan** and **Estes C. Thompson,** vice presidents in charge of engineering and manufacturing, respectively, have been elevated to senior vice presidents. **William R. Cress** continues as vice president—sales.

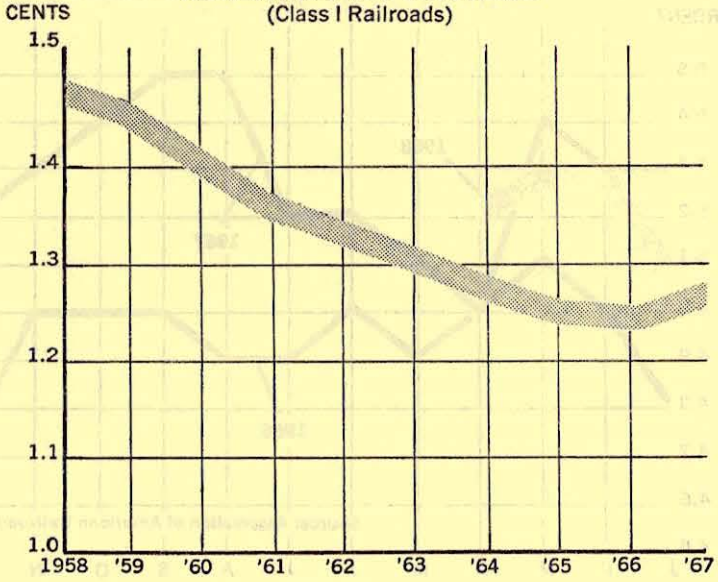
Durox Equipment Co., Cleveland, Ohio, has been established as the fabricating distributor for **Garlock** products available to the railroad industry in the United States and for export. **V. E. Aylor,** formerly with the New York Central and more recently railroad specialist with Garlock, Inc., has joined Durox as vice president of sales, Cleveland.

Sam Hudson, director of advertising and public relations for the **Transportation Equipment Group, Evans Products Co.,** Plymouth, Mich., has been named executive

(Continued on page 37)

REVENUE PER TON-MILE

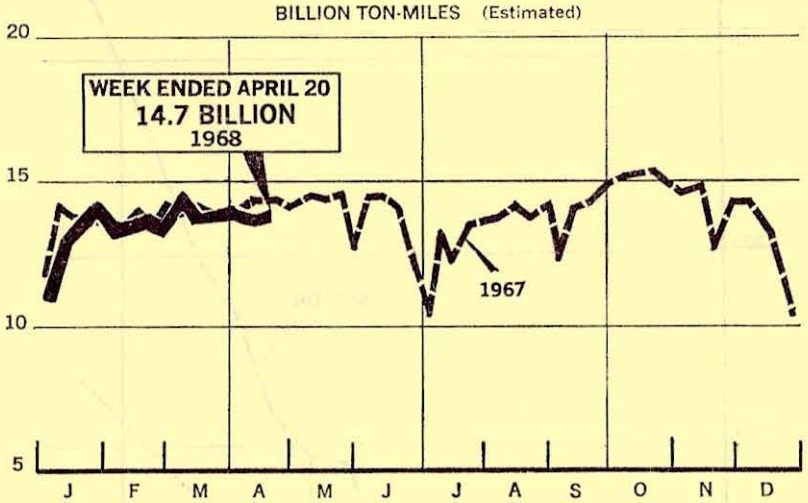
(Class I Railroads)



Source: Economics and Finance Dept., AAR.

RAIL FREIGHT TRAFFIC TRENDS

BILLION TON-MILES (Estimated)

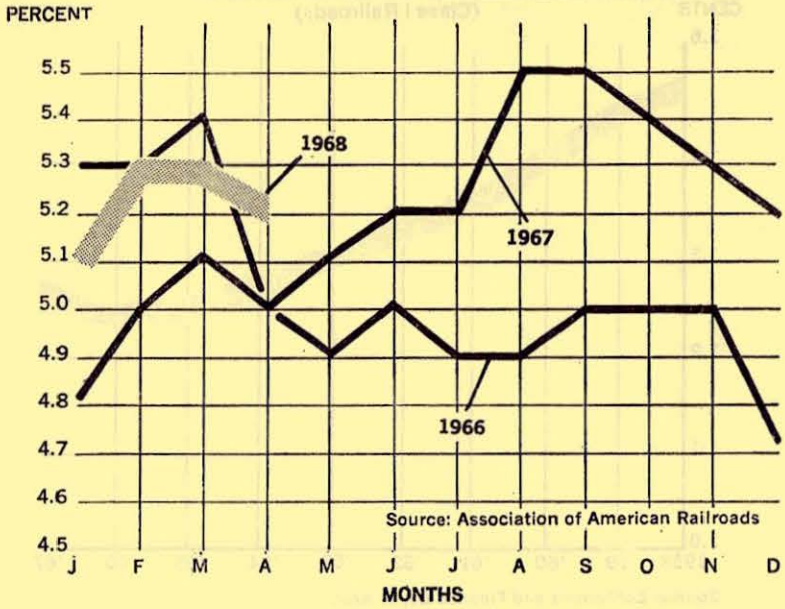


Source: Association of American Railroads

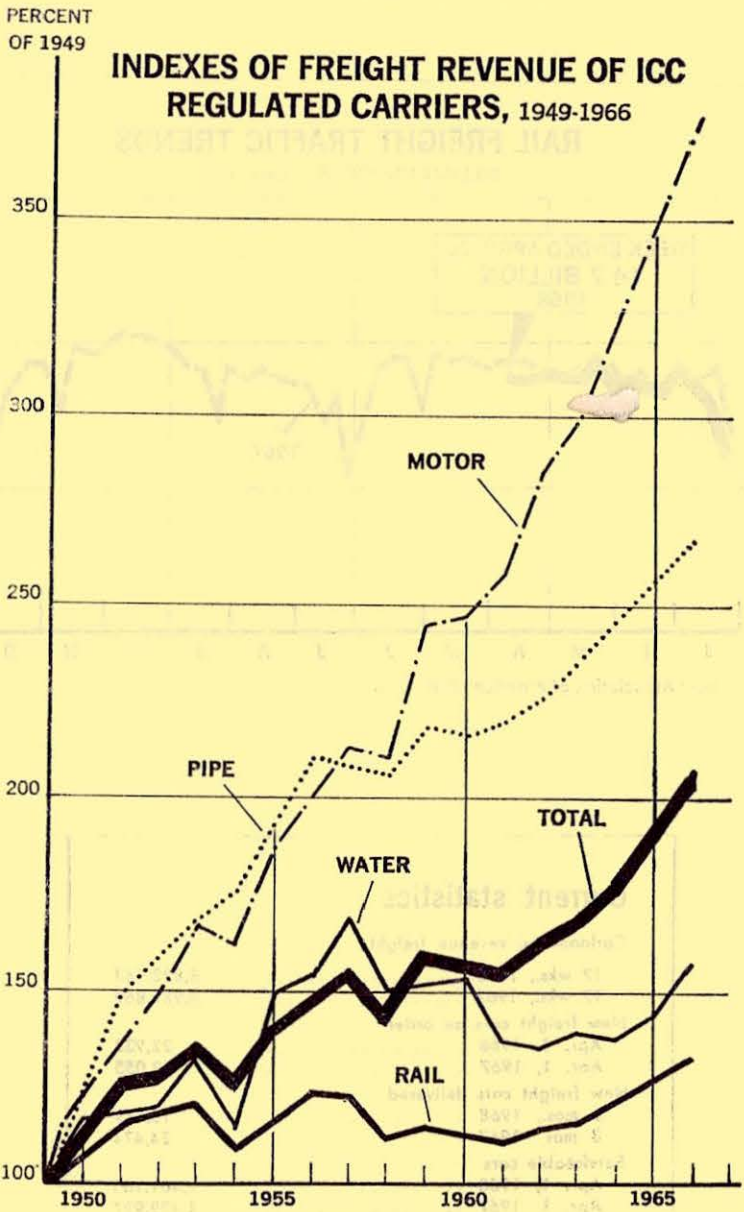
Current statistics

Carloadings, revenue freight	
17 wks., 1968	8,822,783
17 wks., 1967	8,989,869
New freight cars on order	
Apr. 1, 1968	22,933
Apr. 1, 1967	42,055
New freight cars delivered	
3 mos., 1968	16,179
3 mos., 1967	24,474
Serviceable cars	
Apr. 1, 1968	1,401,160
Apr. 1, 1967	1,422,997

FREIGHT-CAR BAD-ORDER RATIO



INDEXES OF FREIGHT REVENUE OF ICC REGULATED CARRIERS, 1949-1966



Source: Bureau of Economics, ICC. The year 1966 is the latest for which freight revenue data have been compiled for all regulated carriers.

MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended April 27 totaled 569,944 cars, the Association of American Railroads announced on May 2. This was an increase of 12,844 cars, or 2.3%, compared with the previous week; an increase of 2,082 cars, or 0.4%, compared with the corresponding week last year; and a decrease of 4,149 cars, or 0.7%, compared with the equivalent 1966 week. Ton-miles generated by carloadings in the week ended April 27 are estimated at 14.9 billion, an increase of 2.9% above the corresponding week of 1967, and 3.7% above the 1966 week.

REVENUE FREIGHT CARLOADINGS

For the week ended Saturday, Apr. 27

District	1968	1967	1966
Eastern, including Allegheny and Pocahontas ..	233,663	226,639	221,478
Southern	119,401	119,358	110,847
Total Eastern and Southern Districts	353,064	345,997	332,325
Northwestern .	67,895	73,888	83,470
Central Western	108,636	107,878	117,673
Southwestern .	40,349	40,099	40,625
Total Western Districts	216,880	221,865	241,768
Total All Roads	569,944	567,862	574,093
Commodities:			
Grain and Grain Products	34,192	40,615	52,487
Livestock	1,086	1,288	2,213
Coal	112,563	114,559	84,450
Coke	8,633	7,651	8,927
Forest Products	40,012	38,722	40,369
Ore	44,691	41,434	47,043
Merchandise l.c.l.	3,844	5,313	6,155
Miscellaneous .	324,923	318,280	332,449
Apr. 27	569,944	567,862	574,093
Apr. 20	557,100	560,891	543,639
Apr. 13	534,918	553,996	543,049
Apr. 6	528,398	543,761	568,683
Mar. 30	554,192	537,909	544,787
Cumulative total, 17 weeks ...	8,822,793	8,989,869	9,218,853
Estimated revenue ton-miles (billions) 17 weeks ...	235.2	234.5	234.1

PIGGYBACK CARLOADINGS

U. S. piggyback loadings for the week ended Apr. 20 totaled 25,165 cars, carrying 39,495 trailers, compared with 24,702 cars, carrying 40,815 trailers, in the corresponding 1967 week. Loadings for 1968 up to Apr. 20 totaled 391,373 cars, carrying 636,342 trailers, compared with 358,770 cars, carrying 588,937 trailers, in the corresponding period of 1967.

IN CANADA

Carloadings for the seven-day period ended April 14 totaled 64,187 cars, compared with 68,880 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd. from Connections
Totals for Canada		
April 14, 1968.....	64,187	24,113
April 14, 1967.....	72,948	26,693
Cumulative Totals		
April 14, 1968.....	994,521	356,431
April 14, 1967.....	1,039,419	370,448

FREIGHT TRAIN CARS

• *Baltimore & Ohio.*—Leased 500 new 100-ton gondolas, valued at $6,125,625 from CIT Leasing Corp. The cars are being built by Greenville Steel Car and deliveries will be completed this month.

• *Southern.*—Ordered 84 100-ton, 86½-ft hi-cube box cars from Greenville Steel Car at a cost of $2,700,000. Delivery of the cushion underframe cars will begin in September.

TRANSIT

• *Chicago Transit Authority.*—General Railway Signal was awarded a $3.6 million contract for cab signaling and an automatic speed control system for extensions of the CTA.

FOREIGN

• *Korea.*—The Korean National Railroad will purchase 30 diesel locomotives from the U.S. at a total estimated cost of $6 million. A $4.5-million Export-Import Bank loan, just authorized, will be augmented by a cash payment to be made by the Korean government. The supplier is also expected to participate in the financing. Involved are 10 1,800-hp main line units and 20 800-hp switchers.

ORDERS AND DELIVERIES

• Orders were placed in March for 4,188 new freight cars, compared with 5,614 in February, and 5,028 in March 1967. Orders for rebuilt cars in March totaled 41 cars, compared with 126 in February and 881 in March 1967. Nearly 7,000 new and rebuilt cars were delivered in March, up 1% over the February total. Of the March car deliveries, 3,978 were built new by contract car builders, 1,734 were built new in railroad shops, and 1,234 were rebuilt cars. The backlog of new cars on order and undelivered on April 1—reflecting the "continued pressure on railroad capital spending due to financial stringency," according to the American Railway Car Institute—was 30,193, compared with 33,195 on March 1, and 51,472 on April 1, 1967

FREIGHT TRAIN CARS DELIVERED AND ORDERED IN MARCH AND BACKLOG OF ORDERS ON APRIL 1—ALL RAILROADS AND PRIVATE CAR LINES

Delivered

	March, 1968	February, 1968	March, 1967
Built New by Car Builders	3,978	4,358	7,054
Built New in R.R. Shops	1,734	1,396	2,102
Built New—Total	5,712	5,754	9,156
Rebuilt	1,234	1,130	1,292
TOTAL DELIVERED	6,946	6,884	10,448

Ordered

To be built New by Car Builders	3,408	2,814	3,824
To be built New in R.R. Shops	780	2,800	1,204
To be built New—Total	4,188	5,614	5,028
To be Rebuilt	41	126	881
TOTAL ORDERED	4,229	5,740	5,909

ON ORDER AND UNDELIVERED

	April 1, 1968	March 1, 1968	April 1, 1967
To be built New by Car Builders	11,894	12,469	32,049
To be built New in R.R. Shops	11,039	12,273	10,006
To be built New—Total	22,933	24,742	42,055
To be rebuilt	7,260	8,453	9,417
TOTAL ON ORDER	30,193	33,195	51,472

YOU OUGHT TO KNOW

Work under way on Chicago's new transit lines

Set-up work is nearing completion, and a rail-welding production line will soon be at work in the median strip of Chicago's Ryan Expressway, where one of two new rapid-transit extensions will be built. Rail will be welded into 858-foot lengths and stockpiled in the median strip until track-laying begins in late July or August. The 10-mile Ryan route is scheduled for completion in November. Railway Automated Machinery, builder of the extensions, said rail-welding set-up will begin for the Kennedy Expressway median-strip line in September.

Railroad ad men plan meeting in St. Louis

"The Changing Face of Railroad Advertising," will be the theme of the 44th annual meeting of the Association of Railroad Advertising Managers in St. Louis, May 12-15. The program will include talks on selling budgets and programs to management, the coordination of advertising and public relations efforts, advertising research, corporate image vs. product advertising, and problems of merger, among other topics. A panel will discuss physical distribution.

10th birthday for transit magazine published by GE

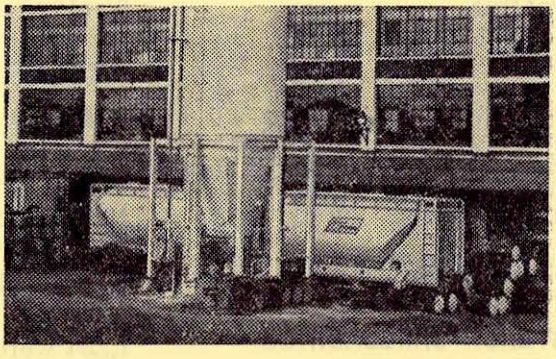
A month ago, Bill Stokes, general manager of San Francisco's Bay Area Rapid Transit, singled out General Electric as one firm that has done much to promote transit to opinion leaders and the general public. Much of that has been accomplished through the medium of "Going Places" the quarterly transit magazine run by GE's Russell Bowersox, now marking its 10th anniversary.

Pittsburgh plans Transportation Week events

Next week (May 12-18) is National Transportation Week, and 14 organizations in Pittsburgh are planning to celebrate the occasion. Transportation advances on land, air and water will be featured during the week's program being coordinated by the Chamber of Commerce of Greater Pittsburgh. Events will include rail exhibits, plane flights over the city, and public inspection of a variety of water craft. The aim: "To create a new image of intermodal transportation as it relates to the daily lives and needs of Pittsburghers."

First-quarter loss bigger, RI reports

Things are not looking up for Rock Island, based on results of the first quarter of 1968. Last year, when the road posted an over-all net loss of $16.1 million, the first-quarter deficit was only $699,896. In 1968, RI is reporting a January-through-March loss of $1.8 million. Revenues and expenses were both up slightly.



Tank cars now carry super-fine, problem chemical

A powdered chemical finer than talc that tended to "bridge" or "rat-hole" rather than flow freely is now successfully being carried in bulk in railroad tank cars. The chemical, titanium dioxide, used in paints, plastics, inks and other products, was once confined entirely to bag shipments because of the difficulty in handling. Experiments with a Butler Manufacturing Co. pressure differential highway trailer and a North American Car PD-3900 rail tank car proved the feasibility of moving the Ti02 in bulk. Estimates are that users of the chemical will be able to save up to $8 per ton by shipping in bulk.

Sam Hudson
Evans

Ford G. Brand
Toronto Transit

James T. Fisher
Toronto Transit

D. Crawford Smyth
Toronto Transit

(Continued from page 32)

vice president and general manager of **Frank Hedge, Inc.**, a Detroit public relations firm. Mr. Hudson will continue to direct the Evans' Transportation Equipment Group's public relations and advertising activities as an account of Frank Hedge, Inc. (RA, April 22, p. 36).

TRANSIT

Dolores K. Allison has been appointed public information director, **Washington Suburban Transit Commission,** Silver Spring, Md., succeeding **Penny Feuerzeig,** resigned to become news editor, Montgomery County Sentinel. Miss Allison is former president of The Travel Shop, Ltd.

Ford G. Brand has been elected vice chairman, **Toronto Transit Commission.** He was first appointed to the Commission by Metropolitan Toronto Council in March 1960. **James T. Fisher** and **D. Crawford Smyth** have been appointed commissioners by the Council. They succeed **Clarence C. Downey** and **Charles A. Walton.** Mr. Fisher was formerly a chief engineer, Bell Telephone Co. of Canada. Mr. Smyth is president and general manager, Mitchell Colour & Chemical Co., Ltd., Toronto.

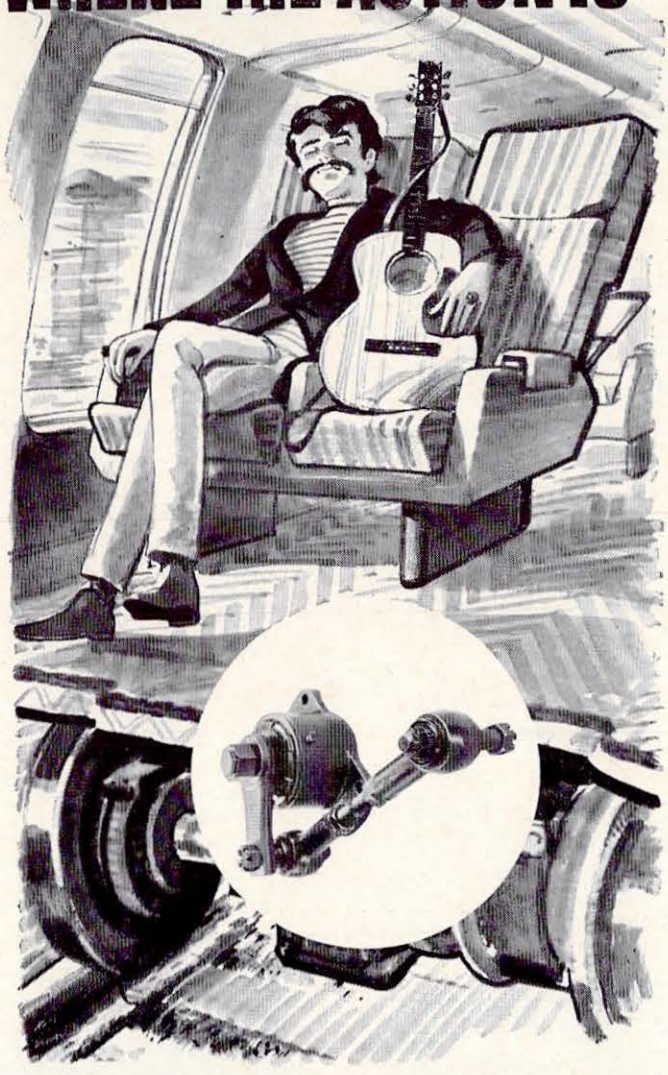
OBITUARY

Frank D. Beale, 77, president of the **Virginian** until its merger with the **Norfolk & Western,** died recently in Norfolk, Va.

Curtis W. Law, Jr., 38, structural engineer and chief track specialist, Office of High Speed Ground Transportation, **Department of Transportation,** died April 17 at St. Agnes Hospital, Baltimore, Md.

Sylvester J. Witt, 78, retired vice president—traffic, **Nickel Plate** (now Norfolk & Western), died April 21 in an Akron, Ohio, hospital.

NO ROCK AND ROLL AT 160 MPH... HOUDAILLE PUTS RIDE CONTROL WHERE THE ACTION IS

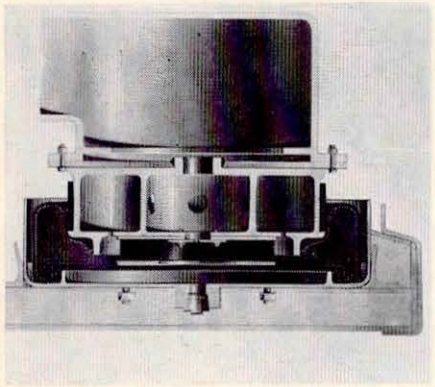


Makers of the new high-speed trains are counting on Houdaille to keep passengers in solid comfort over existing track beds. Rugged Houdaille Rotary Shock Absorbers damp lateral motion, eliminate rock and roll on curves and straightaways. Completely sealed Houdaille units meet the test for greater parts dependability urgently required for rapid transit development. No exposed working parts. Self-lubrication. On-the-job adjustability. Low maintenance. Just a few of the good reasons to find out how Houdaille can help you provide "air-borne" comfort, with ground-level shock control where the action is. Write for catalogs RSA-567 and FS-165.

HOUDAILLE HYDRAULICS
division of
HOUDAILLE INDUSTRIES INC
536 E. DELAVAN AVENUE
BUFFALO, NEW YORK 14211

Circle 10 on coupon page 38

NEW PRODUCTS REPORT

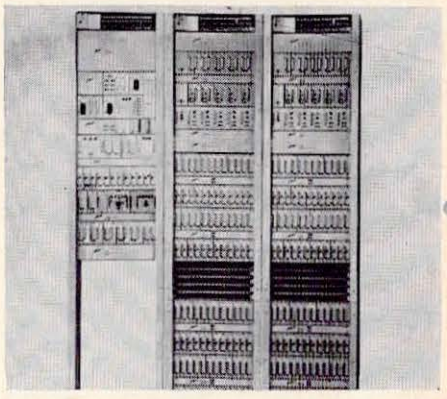


Air springs (RA-1)

Sumiride, a diaphragm type air spring used on high-speed Tokaido lines in Japan and now available for GSI trucks, has rubber bellows in contact with the vertical walls of both the upper and lower reservoirs. It requires less space than the convolute type air spring, thus providing greater flexibility in railway truck design and providing optimum resistance to lateral motion. The spring is especially suitable for General 70 trucks. *General Steel Industries, Inc.*

Communications monitor (RA-2)

The CE-3 communications monitor is direct reading on three bands: 20-80 MHz, 120-180 MHz, and 450-512 MHz. Any frequency in the FM communications spectrum can be selected by turning six knobs. Set the six-digit selector to the channel and the CE-3 measures frequency and deviation simultaneously, or generates the selected channel. A lighted display panel insures that you are on channel. The instrument can also be used as a signal generator. *Cushman Electronics, Inc.*



Radio multiplex (RA-3)

The 46A radio multiplex system provides multichannel service for applications including light routes requiring as few as four voice frequency channels and high density systems requiring as many as 600 channels. The 46A will handle voice, telegraph, facsimile, and broadband data traffic. Noise, crosstalk, level stability and frequency stability are controlled for quality performance from systems covering distances greater than 4,000 miles. *Lenkurt Electric Co., Inc.*

Carryphone (RA-4)

The new 3W single-channel Carryphone is similar in all respects, except for its transmitter, to the standard lantern battery 1.25W Carryphone. The transmitter is type 22 TS-1 used in the Duophone and rated at 3 watts RF output at 10 volts. The 3W with its 3 watt transmitter is designed for use under adverse conditions where extra power is required. *Signal & Communications Division of Westinghouse Air Brake Company.*

Texturing process (RA-5)

Duo-Tex, a texturing process which supplements the Rigid-Tex line, is applied on two levels, with a fine texture within the depressed areas and a soft, velvety appearance in deeper pattern, which hides scratches and dents. Designs will be available in widths to 52 in. and in 11 patterns. The material is available in color; in all metals, ferrous or non-ferrous, and can be fabricated the same as flat roller metal. *Rigidized Metals.*

RAILWAY AGE
THE TRANSPORTATION WEEKLY

30 Church Street, N.Y., N.Y. 10007 READERS' SERVICE (Att. George Johnson)

PLEASE SEND ADDITIONAL INFORMATION ABOUT PRODUCTS IN ADVERTISEMENTS NUMBERED: 1 2 3 4 5 6 7 8 9 10 11 12

PLEASE SEND INFORMATION ABOUT PRODUCTS DESCRIBED ON PAGE 38 MARKED: RA-1 RA-2 RA-3 RA-4 RA-5

NAME ..... TITLE.....

COMPANY .....

ADDRESS .....

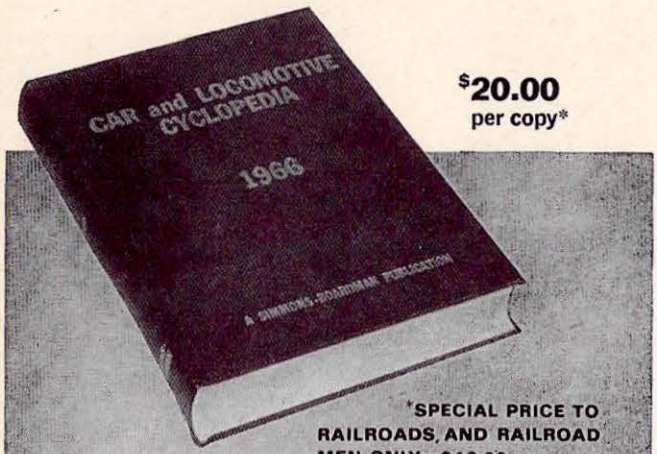
CITY ..... STATE..... ZIP.....

● Inquiries can be processed only if title and company are shown. 5/6/68

For the first time... it's a reference book for

BOTH CARS AND LOCOMOTIVES

1,200 pages of detailed information, drawings and dimensions, includes all pages that would have appeared in the 22nd Edition, Car Builders' Cyclopedia PLUS 250 pages covering specifications and details of locomotives.



$20.00 per copy*

*SPECIAL PRICE TO RAILROADS, AND RAILROAD MEN ONLY—$12.00 per copy

ORDER FROM CYCLOPEDIA DEPT., SIMMONS-BOARDMAN PUBLISHING CORPORATION, 30 CHURCH ST., NEW YORK, N.Y. 10007

RAILWAY AGE Weekly SUBSCRIBER SERVICE

Please include address label when writing about your subscription to help us serve you promptly.

Write to: P.O. Box 961, Bristol, Conn. 06010

CHANGE OF ADDRESS: Notify us five weeks before your intended move in order not to miss any issues. The Post Office forwards magazines only at the subscriber's instructions and expense.

TO SUBSCRIBE: Check proper square below and give business or job data.

☐ New ☐ Renewal

☐ 1 yr $6 ☐ 2 yrs $9

☐ Remittance enclosed ☐ Bill me later

Name of Railroad

Title or position

NEW ADDRESS

name please print

address

city

state zip-code

AFFIX LABEL

state city address name please print zip-code

If you have no label handy, print OLD address here.

Advertisers' Index

Adams & Westlake ..... IFC
Berwick Forge & Fabricating Corporation 6
Bethlehem Steel Corp. 3
Brenco, Incorporated 4
General Electric, Transportation Systems Division 10
General Railway Signal Company ..... IBC
General Steel Industries, Inc. ..... BC
Houdaille Industries, Inc. 37
International Nickel Company, Inc., The 13
Monogram Industries, Inc., Venice Division 31
Ohio Brass Company, Transit Division 9
Railway Educational Bureau 32
Sinclair Refining Company 14-15

HAVE A HEART SUPPORT YOUR HEART FUND

must dispose
EXCESS LIFT TRUCKS
pneumatic & Hd. Rbr
Hillsdale Mfg. Co.
501 W. Carleton Rd.
Hillsdale, Mich.

PROJECT ENGINEER, Design, Development, Testing with M.E. Degree needed for long established Railway Supply company in Metropolitan New York area. Submit resume. Salary commensurate with qualifications. Box 243, Railway Age, 30 Church St., New York, N.Y. 10017.

Mature young mechanical engineer for assistant chief engineer for growing young railroad supply and service organization based in Chicago. Working knowledge of hydraulics desirable. Please submit brief resume and references to Box 223, Railway Age, 14 E. Jackson Boulevard, Chicago, Ill. 60604.

Hayes Derails
Hayes Bumping Posts
Hayes Wheel Stops
Choice of railroad MW men since 1903
Hayes Track Appliance Co.
Richmond, Indiana 47374

SWINDELL-DRESSLER COMPANY
A Division of Pullman Incorporated
ENGINEERS
Rail-Transit-Highway
Airports-Bridges
Transportation Systems
441 Smithfield Street
Pittsburgh, Pennsylvania
15222

Advertising Sales Department

C. J. Fisher, vice president—sales, Chicago

New York, N. Y. 10007,
30 Church St., (212) 964-3060
W. A. Cubbage—regional sales manager
Charles E. Keil—district manager

Chicago, Ill. 60604,
14 E. Jackson Blvd.
(312) 427-3501
K. F. Sheeran—regional vice president;
John M. Brennan—regional sales manager
Peter Hoagland
Ross Mandic
—district managers

Lakewood, Ohio 44107,
12700 Lake Ave., Apt. 1310
(216) 226-8038
Harry H. Melville—vice president

Pittsburgh, Pa. 15219, Room 720,
(412) 471-7871
Frick Building
William M. Champion—regional sales manager
Ronald M. Giallonardo—district manager

Atlanta, Ga. 30309,
22 Eighth St., N. E.,
TRinity 2-6720—J. S. Crane

Dallas, Tex. 75219,
3636 Cedar Springs (#207)
(214) 521-2322
Joseph Sanders

Los Angeles, Cal. 90017,
1313 West Eighth St.
(213) 483-8414
Fred Klaner, Jr.

San Francisco, Cal. 94133,
515 Pacific Ave.
(415) 421-7004
Lewis A. Vogler & Co.

London S. W. 1, England
TRafalgar 6318
67/68 Jermyn St., St. James's
Max F. Holsinger, Peter Clifton, F. E. Mizen

Manchester 22, England
Haletop
Wythenshawe Civic Center
Ian Goulden

Paris, 8e, France
70 Rue de Ponthieu
Stephen Brown-Joussard

4 Düsseldorf-Rath
Eitelstrasse 32
Max F. Holsinger,
E. Hillerbrand, Herbert Haibt, Reinhard Schomburg

Tokyo, Japan
Sun Gain Shia, Ltd.
Shiba Nikkatsu Bldg.
13, Shiba Park
Minato-Ku
C. H. Yiu, Managing Director

VIEWPOINT

Take another look, Mr. Leighty

Reactions to the Messer Report came swiftly last week; and they were not entirely unpredictable.

Transportation Secretary Alan Boyd's comments came as no surprise to those who know and appreciate his sympathetic grasp of railroad passenger problems. ICC Examiner John S. Messer had proposed a National Rail Passenger System that would more or less keep things as they are. Mr. Boyd replied: "We would prefer to see the traveler profit from innovation and development in railroad transportation rather than simply from the preservation of present concepts."

A different kind of reaction came from the Railway Labor Executives' Association—and it was, we are sorry to say, equally predictable. RLEA Chairman George E. Leighty issued a statement expressing hearty approval of the Messer recommendations and urging their swift implementation.

But while he had much to say in favor of the Messer Report, Mr. Leighty most oddly withheld comment on that portion of the report which, one would think, would most interest the brotherhoods. We quote from page 18 of the Messer document:

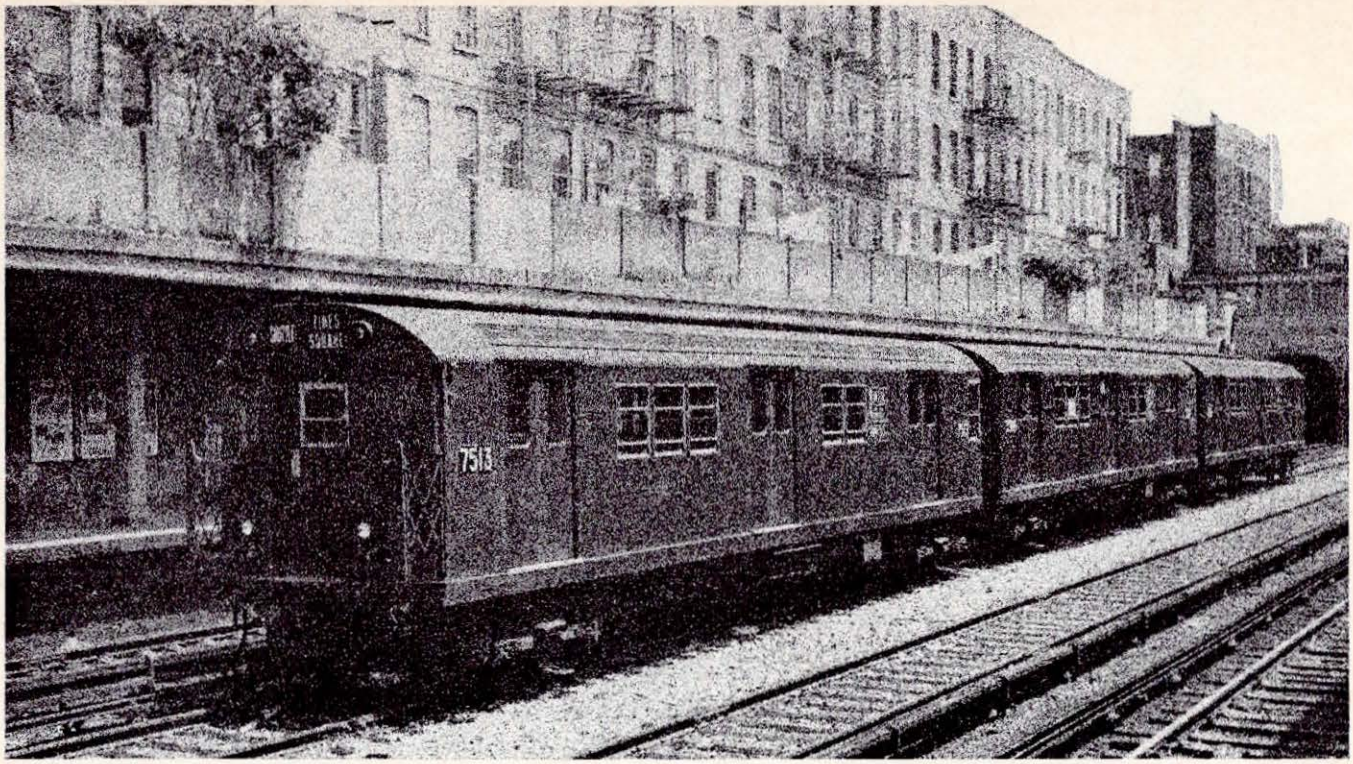
> Under agreement between the carrier and the various labor organizations wages are determined on "basic work days." The basic work day for an engineer and fireman in passenger train service is 100 miles of operation. For conductors and brakeman it is 150 miles. If the runs exceed those distances, the crew is compensated on a prorated mileage basis beyond the minimum. For example, on the involved trains ["Sunset Limited"] the engineer and the fireman receive approximately a day and a half basic pay between New Orleans and Lafayette, La., a distance of 145 miles. The running time between these two cities is 3 hours and 16 minutes. Between Sanderson and Del Rio, Tex., the distance is 128 miles, the running time is 2 hours and 55 minutes, and the engineer and the fireman receive approximately 1¼ days' basic pay. In addition, the engineers are paid overtime if their time on duty exceeds the published time schedule.

Examiner Messer's report was confined to the "Sunset Limited," but he could have found many other such examples of how today's trains are being bled by yesterday's pay rules. To cite just one: A famous streamliner on a run of roughly 1,000 miles is now being charged $750,000 a year for the 54 jobs required by union rules for every round trip. The railroad estimates that eight men working an eight-hour day could do the same job for slightly more than $100,000 a year. This train is still running—at a loss of $1 million a year. We won't be surprised when the abandonment petition is filed; and Mr. Leighty shouldn't be surprised, either.

This is not to suggest that labor costs alone have been responsible for the fact that most passenger trains can no longer pay their own way. The real villains of the piece, as we all know, are (1) the automobile and (2) the airplane.

But those interested in fixing the "blame" for the demise of the passenger train cannot overlook the crew-cost item.

RLEA's Mr. Leighty suggests that "it is only through the leadership of the ICC that this country will have any rail passenger service." How about some leadership from the brotherhoods, Mr. Leighty —in the area where they are most qualified to speak?



Brooklyn...1960

And the shuttle train raced down the track on another test run. There were people aboard—GRS engineers—but no one was at the controls. Automation had taken over—including programmed starting, running speed control, precision station stopping, and automatic control of doors and destination signs. The successful tests led to placing the train in regular service between Grand Central and Times Square.

GRS achieved full transit automation long ago—and can do it much better now. Since the Brooklyn tests, we have devised high-frequency jointless track circuits, feedback traction control to ensure smooth, comfortable riding, electronic onboard cab signals and speed control, Wee-Z impedance bonds, high-speed communication systems incorporating micrologic circuits . . . and more.

For information on modern rapid transit signal and control systems, simply write to our transit controls group in Rochester.

GENERAL RAILWAY SIGNAL COMPANY

A UNIT OF GENERAL SIGNAL CORPORATION

ROCHESTER NEW YORK 14602

ATLANTA BOSTON CHICAGO MONTREAL NEW YORK OAKLAND ST LOUIS ST PAUL

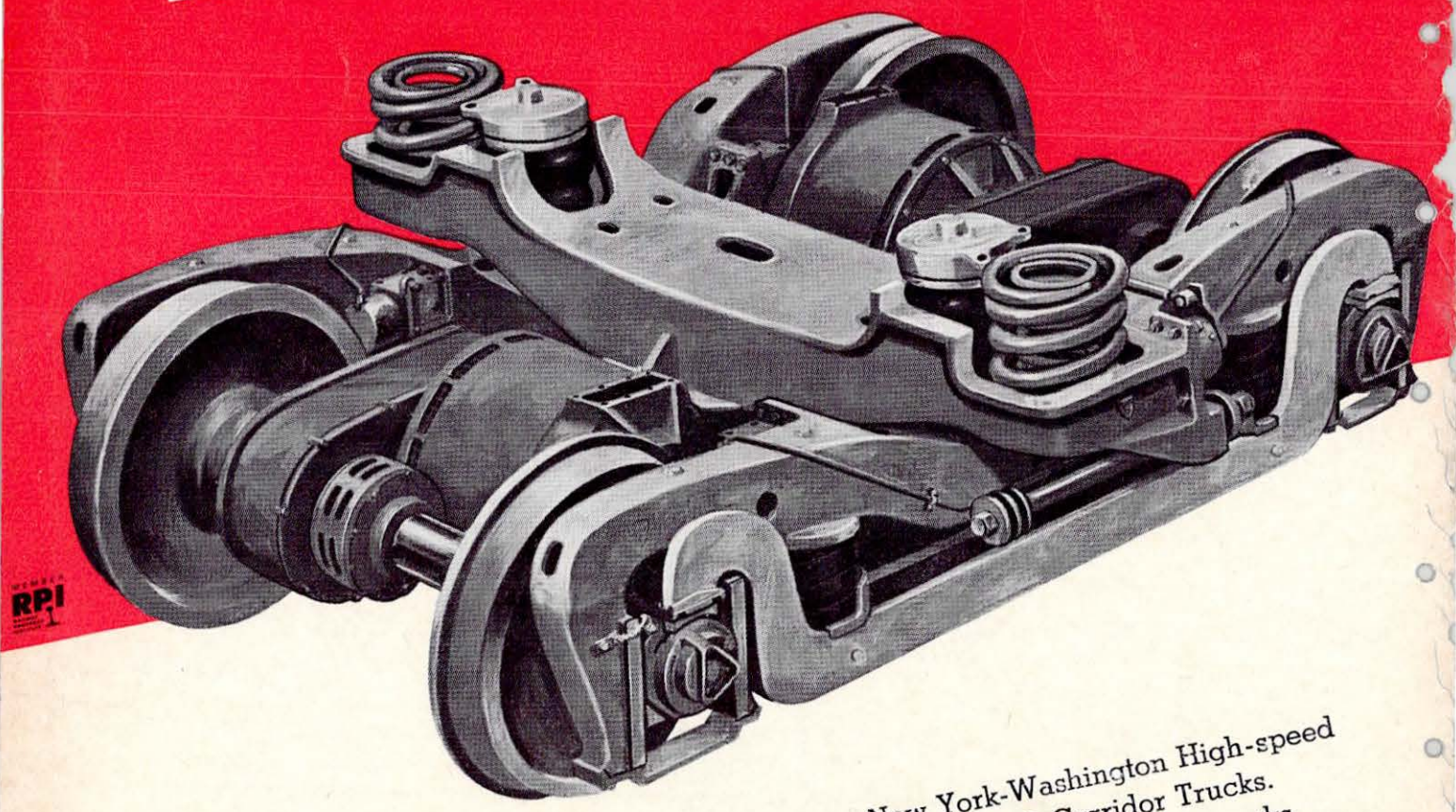
3446

Circle 2 on coupon page 38

ANOTHER New Truck by GSI

The General-70 Corridor Truck

High-speed trains are just as safe and comfortable as the trucks they ride on.



For maximum safety and comfort—the New York-Washington High-speed Cars of the Penn Central ride on GSI's General-70 Corridor Trucks. *Computer-analyzed* . . . these are the world's most advanced trucks. They feature a double suspension system . . . Pirelli springs for primary suspension plus high-and-wide air-coil bolster springs for roll stability with soft springing. And, of course, one-piece cast steel framing is basic for safety, long life and low maintenance.

GENERAL STEEL INDUSTRIES INC.

CASTINGS DIVISION | GSI

Granite City, Ill. • Philadelphia, Pa. • San Francisco, Calif.

Circle 3 on coupon page 38